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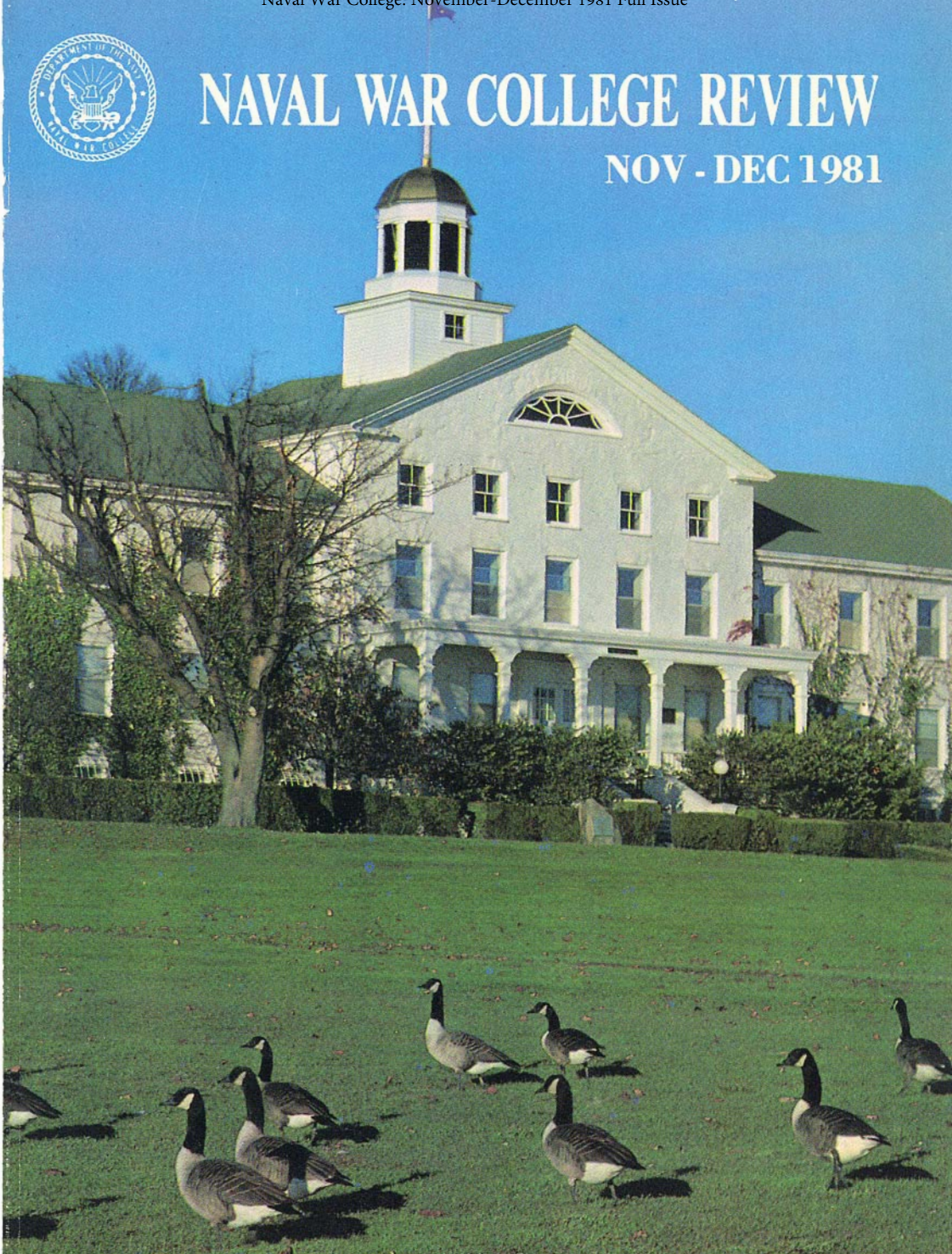

# NAVAL WAR COLLEGE REVIEW

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**Cover: Each year, from late Autumn to early Spring, 60 to 70 pairs of Canada geese make the green in front of the Naval War College Museum their daytime feeding grounds. Photo by PHC Joe Ranieri.**

## PRESIDENT'S NOTES

In the July-August 1981 issue of the *Review* I mentioned the establishment of the Center for Naval Warfare Studies (CNWS) at the Naval War College. The Center is well underway with a full head of steam, under the able directorship of the Honorable Robert J. Murray, our former Under Secretary of the Navy, as its first Director. Four organizations have been consolidated under Mr. Murray's direction: the Strategic Studies Group is to review and provide greater direction to strategic thinking within the naval service; the Center for Advanced Research will enable War College students, academics, and other researchers to participate in individual and group research projects related to tactical and strategic interests; the Center for War Gaming will test strategic and tactical ideas and warfighting concepts developed here and in the fleet; and the Naval War College Press will publish in both classified and unclassified forms the products of such studies, research and wargaming.

All of these functions have been set in motion or redirected, and in the first three months of the Center's consolidated effort the four organizations have been merged into an effective team, well on its way to fulfilling the mission projected by the Chief of Naval Operations. The Strategic Studies Group—the six Navy officers and two Marines selected by the CNO and the Commandant—have coalesced into a strong interactive group, representing a variety of warfare disciplines—and not at all bashful about challenging sacred cows. The present SSG Fellows who will spend about a year in research and formulation of their ideas, are:

| SSG Fellow and Background |
|---|
| Capt. Stu Landersman<br>COMDESRON 23. CO TACTRAGRUPAC. OP-03. DD |
| Capt. Dan Wolkensdorfer<br>COMPATWING TWO. OP-95. VP |
| Capt. Sam Leeds<br>CO, AMERICA. OP-05. VF |
| Col. Joe Ruane<br>JOINT STAFF. FIELD ARTILLERY. LOGISTICS |
| Capt. Frank Julian<br>MIDEASTFOR. OP-64. DD |
| Lt. Col. Bull Bland<br>CO HMM 165 HQMC. HELICOPTERS |
| Cdr. Bill Owens<br>PCO CORPUS CHRISTI. CO SAM HOUSTON. SECNAV OFFICE |
| Cdr. Art Cebrowski<br>CO FITRON 41. OP-96. VF |

The first efforts of the SSG were dedicated to an intensive workup through readings and sessions with Naval War College Faculty. They also laid out a demanding work plan for the year ahead. The SSG has had the unique advantage of in-depth discussions with the top leadership of the Navy. Visits were made in rapid succession to Atlantic Fleet Command headquarters and Second Fleet in Norfolk; Naval Forces Europe and the NATO Channel Command headquarters in the United Kingdom; NATO Southern Command and U.S. Sixth Fleet headquarters in Italy; and Pacific Fleet and Third Fleet headquarters in Hawaii. There have also been a series of meetings in Washington and here in Newport with the CNO, the VCNO, the Commandant and Assistant Commandant of Marines, Admiral I.C. Kidd, Jr., and other distinguished retired and active military officers, civilian members of government, and scholars and experts from around the country.

CNWS is also sponsoring a series of several-day conferences at the War College. Three have been completed; one on advanced technologies, a second concerning ship-launched cruise missiles, and, just completed, a symposium on "NATO and U.S. Maritime Strategy." The guest list is impressive, and we hope to publish conference resulrs in future issues of the *Review*.

The Center for Naval Warfare Studies is shaping up as an effective and much-needed activity, helping to ensure that Navy warfighting and doctrinal issues are thoroughly examined and that naval missions and capabilities are developed and understood in the context of national objectives, the capabilities and responsibilities of the other services, prospective changes in technology, and the unique character of naval forces.

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Another reason for enthusiasm is the editorial newcomer noted in this issue's masthead. Mr. Frank Uhlig, Jr., for many years the Senior Editor of the Naval Institute and Editor of the world-renowned *Naval Review*, has joined the Naval War College faculty as the Naval War College *Review*'s newest Editor. Many of you already know Frank either personally or by reputation; he is highly respected both for his writing and editing ability and for his qualifications as a naval historian. With Frank aboard as an integral part of the War College and CNWS staff, we predict great things for the *Review*.

EDWARD F. WELCH, JR.
Rear Admiral, U.S. Navy
President, Naval War College

*The thrust of Soviet power southward has become a reality. Soviet occupation of Afghanistan was a dramatic illustration of Moscow's new willingness to extend its control over an area it considers vital because of shared borders. Afghanistan, Iran, and Pakistan, the three countries on the southern rim of the U.S.S.R., have experienced or have the potential to experience major changes. The implications of these changes and their effect on the internal, regional, and global environment are analyzed here.*

# SOVIET FORTUNES ON THE SOUTHERN TIER: AFGHANISTAN, IRAN, AND PAKISTAN

by

**Shirin Tahir-Kheli**

**Background.** The internal dynamics of the region under study were subject to major strains after 1978. The culmination of events that followed the April 1978 Marxist coup in Kabul led not to stability under a new order, but to a series of coups and countercoups.[1] Although the Afghan Communists shared their dependence on Moscow, any other form of agreement was precluded by feuding between the Parcham and Khalq factions. United under the common name of People's Democratic Party of Afghanistan (PDPA), the split between the Parchamis and the Khalqis manifested itself in the different style of the major personalities.

Noor Mohammad Taraki, the first Marxist leader who was from the Khalq faction, soon ran up against problems in overhauling Afghan society to match the Marxist vision of the new order. His reforms in education, land, and social policies were challenged by a majority of Afghans in most of the 28 provinces in Afghanistan. By May 1978, Afghan refugees had begun arriving in Pakistan, and lack of public support for Communist programs was becoming evident.[2]

Growing discontent with the turn of events was also demonstrated in the spirit of active noncooperation that transcended simple dislike of the Marxist programs. The Afghan populace, trained over centuries in individualism, began to make life difficult for the government through a variety of responses ranging from absenteeism from work to individual acts of terrorism against Marxist officials.* Lack

*This aspect of the Afghan personality was recognized by none other than Friedrich Engels who wrote in 1881: "The Afghans are a brave, hardy and independent race [with] their indomitable hatred of rule, and their love of individual independence."[3] Engels also noted the unwillingness of the Afghans to tolerate rule by "European infidels."[4]

of coordinated moves became an advantage for the opposition. By the unpredictability of these actions, the government was denied the oppottunity to anticipate and circumvent them.

Opposition to Taraki's policies solidified because those policies were considered by most Afghans to be against their traditional and religious values.[5] Futthermore, tribal and religious leaders perceived land and social reforms initiated by PDPA as directly undermining their positions of power. With ever-increasing intensity, the Marxists began to run into personal and professional difficulty. As Taraki felt his base of power erode, he moved to institutionalize his links to Moscow by signing a friendship treaty in December 1978. The treaty not only acknowledged the importance of the U.S.S.R. in the new Afghan scheme of things, it created a Soviet stake in the survival of the PDPA.

In addition to the above, the Soviet treaty with Afghanistan must be seen as enabling Moscow to put greater pressute on Iran and Pakistan.[6] Itan was already in a state of turmoil following the publication of an anti-Khomeini missive in January 1978 that resulted in antigovernment tiots in Qum.[7] While the Soviets did not come out against the Shah whom they had cultivated with major economic agreements, the possibility of domestic turmoil ptoviding opportunities remained. This factor, coupled with the tenuous hold of the militaty in Pakistan, raised the specter of the entire security picture on the southern tier coming unraveled for the Soviets who are hypetsensitive to any instability on their borders.

While Soviet involvement in Iran and Pakistan was indirect, in Afghanistan it was both direct, as well as mounting. Between April 1978 and March 1979, 75 new agreements for economic assistance valued at a total of $200 million were signed by Moscow with Kabul.[8] These agteements brought an influx of nearly 4,500 Soviet advisers who helped the Taraki regime govern in the face of tebellion.

Once the Soviet commitment to Afghanistan deepened, Pak-Afghan relations deteriorated, reflecting the pattetn established since the mid-1950s. It was a vicious cycle: as domestic opposition to Marxist rule increased, Taraki turned to Moscow and that only strengthened local charges that he had "sold Afghanistan to the Soviet Union." Unable to explain why the Afghan people were resisting the "progressive reforms" sponsored by PDPA, Moscow and Kabul both focused their frustration on Pakistan by accusing it (along with China, Itan, and the United States) of fomenting trouble. The flight of Afghan refugees to Pakistan was a tremendous embarrassment as both Kabul as well as Moscow were loathe to admit the failure of the Marxist revolution. Instead, they put pressure on Pakistan to stop the refugee flow and return those already present. Ptessure was applied through violations of Pakistani airspace. Between January and July 1979, Pakistan counted 56 violations of its air and ground space where penetrations of up to 3 miles occurred.

The acceleration of fighting brought increased Soviet militaty participation. By mid-1979 reports of Soviet pilots flying missions against opposition sttongholds were circulating in Afghanistan. Furthermore, both the East Germans (who opened an Embassy) and Cubans were being drawn into assisting the Soviets in Afghanistan as they have done elsewhere, e.g., South Yemen. While coping with the problems of retaining control, Moscow was becoming painfully aware of the alienation of the Afghan population. Yet, Taraki as well as his successor, Hafizullah Amin, were in no mood to compromise on the rapid pace of reforms. In fact, Amin was inrent on speeding up the process of change. He declated that his 16 September 1979

coup against Taraki marked "the beginning of a new socialist order."[9] The harshness of Amin's policies resulted in the deepening of Afghan resentment. His dependence on Moscow grew in direct proportion to the weakening of his hold on his own populace. Yet, Amin was unwilling to listen to Soviet advice to moderate his policies somewhat. Nor was he able to create a nation where none existed. Afghanistan, a country characterized by regional disunity, ethnic and linguistic diversity, coupled with a fundamentally traditional social structure, continued to outpace Marxist reforms.

Myriad explanations have been offered for the Soviet decision to intercede in Afghanistan with troops on 27 December 1979 and occupy the country and replace Amin with the Parcham leader, Babrak Karmal.[10] They range from Soviet fear of Islamic revivalism on the Muslim population of Central Asia to the protection of the Socialist doctrine and a playing out of the Brezhnev Doctrine. Overall, it can be said that Soviet interest dictated a policy of neutralization of Asia *vis-à-vis* the Western alliance system.[11] The departure of the Shah of Iran in January 1979 had impinged on U.S. fortunes not only in Iran but throughout the region by virtue of the Shah's role as an anchor of the American position in Southwest Asia.

Pakistan ceased to offer Moscow much challenge except as an annoyance because of its close ties to Beijing. The Carter administration's singular lack of enthusiasm for Pakistan left it generally to fend for itself. Nonalignment and the Islamic bloc offered a new focus for Pakistani foreign policy. The Soviet move into Afghanistan increased political pressure upon Pakistan because of the Soviet military presence on adjacent soil. However, the invasion itself unleashed a storm of international diplomatic fury that was led by the United States and Pakistan.

Washington finally recognized what it had failed to acknowledge almost a year earlier when American Ambassador Dubs had been murdered in Kabul on 14 February 1979. That is, the Soviets controlled Afghan governmental machinery to a great extent and had obviously decided to end even the nominally neutral position Afghanistan held after 1978. President Carter claimed that the Soviet invasion of Afghanistan had finally taught him something about the Russians. In an about face on U.S. strategy in Southwest Asia, he ordered that henceforth "any attack by any outside force to gain control of the Persian Gulf region will be regarded as an assault on the vital interests of the U.S.A. And such an assault will be repelled by any means necessary, including military force."[12]

The view from Islamabad was equally alarming. Pakistan had suddenly become a frontline state, its new position in South Asia commensurate with that occupied in the past by Afghanistan. Pakistani leaders saw the Soviet move as being deliberate and part of a plan to move beyond because Afghanistan, in and of itself, offered no prize.[13] The potential for further destabilization of Pakistan, as well as Iran, seemed a very likely part of the "great game." Although Islamic revivalism in Iran and Pakistan was a force to reckon with, there were fundamental differences between the two, and it would seem unlikely that Moscow could have been impelled by the fear of pan-Islamic sentiments reaching its Central Asian Muslim population.[14] Islamabad considered it much more likely that Amin had become far less pliable than was desirable from Moscow's point of view. The latter also suspected that in his attempts to dodge Soviet pressure, Amin was likely to turn to Washington, Beijing, and Islamabad. After years of indirect and 19 months of direct control, this was not a scenario to Moscow's liking.

Pakistan's role within the Islamic bloc is critical for the diplomatic isolation of the Babrak Karmal regime. According to General Zia: "The battle for Pakistan will be fought in Afghanistan."[15] If this is indeed the case, then Pakistan is forced to internationalize the crisis by keeping ir in the forefront of world opinion. The Soviets have repeatedly warned that Pakistan must cease and desist from all activities construed by the former as denying legitimacy to the Karmal regime.

The Soviets will continue to exploit opportunities present, as well as seek new ones in building a srring of anti-American nations in Southwest Asia. This policy has created an American stake in Pakistan for continued stability. In other words, Pakistan has become crucial in the achievemenr or denial of the Soviet strategy. In this context, a number of options faces Pakistan today: first, it can accept Soviet turelage, promise to "behave" itself by becoming totally passive *vis-à-vis* India and the U.S.S.R. It can abandon its role in the Islamic Conference and cut its special links to China. It can refuse any assistance from the United States. Having thus been thoroughly neutralized, the Soviets will (in concerr with the Indians) permit its continued existence, at leasr in the short run. While there are advocates of this view within Pakistan, even they recognize the fact that despite Pakistani acceptance of Soviet demands, Moscow is likely to continue covert assistance to undermine Pakistan, most likely through support of dissident Pathan and Baluchi elements.

Secondly, Pakistan could continue ro seek assistance from China and the Islamic bloc ourside the purview of any collaboration with rhe Unired States; in other words, a regional response organized and carried out solely with regional means. The problem with rhis response, beyond the use of purely diplomatic means, is that it is untenable. Because the Pakistani Governmenr believes that the Soviet invasion of Afghanistan was a military move that, if it is to be met at all, must have a military component, regional reliance is not the sole answer. Despite limited Chinese assistance and Saudi money, modernization of Pakistani Armed Forces cannot be accomplished without American assistance. All of this is necessarily predicated on the assumption that a Soviet move into Pakistan will occur in tandem with an Indian putsch. jAnd increasing Pakistani military preparedness on either the northern or the eastern front delays the move by raising its costs.

Thirdly, Pakistan can renew its links with rhe United States. Despite Pakistani withdrawal from CENTO in March 1979 because, according to Zia, it was "useless," a new American commitment to the security of Southwest Asia is underway. Pakistan recognizes that, in the final analysis, only the United States can prevent the Soviets from moving further south. Part of this strategy relies on the psychological and diplomatic signals that stem from demonstrating that the United States recognizes and will challenge the ambitious plans of the Soviet Union. It also signals that Washington no longer accepts the "slow process of self-Finlandization."[16] While this strategy may not end Soviet undermining of Pakistani security through covert assistance ro opposition groups, it does impede the success of the plan by slowing it down. Because the Soviet Union is held as being responsible for changes in the status quo, Moscow has to be sure that it is prepared to accept the consequences of Pakistani destabilization. This option is, of course, viable only if the American commitment is a susrained attempt to check further Soviet expansion and not merely dependent on the preferences and proclivities of a single administration.

**The Regional Context.** Soviet fortunes in Afghanistan, Iran, and Pakistan

are also helped or hindered by the regional environment. Here too events of recent years have provided arenas of opportunities for Moscow to exploit. A number of these can be specifically mentioned.

The full effect of the Iranian revolution is yet to be played out. Because of the close identification of the Shah with the United States, the anti-Americanism of the Khomeini regime as demonstrated in the hostage crisis remains monumental. The Soviet Union reinforces the image of American exploitation of Iran through radio broadcasts and in direct contact with Iranian officials. Denial of Iran to the United States has become as important to Moscow as denial of Southwest Asia to the U.S.S.R. is currently to Washington.

Events in Iran have the potential of impinging on other regional actors. The Khomeini call (by design or example) to Shia populations to overthrow existing regimes in Pakistan, Saudi Arabia, Kuwait, Bahrain, and the United Arab Emirates makes regional governments uneasy. Because these governments are conservative and dependent on American protection, and also are crucial for Western economic survival because of their vast oil resources, any change that has the potential of disturbing present alliances with the West is extremely important. In particular, if the overthrow of existing regimes who are friendly with the West can be achieved from within the system, then Moscow cannot be held accountable although it could turn out to be the main beneficiary. It is with this kind of a scenario in mind that Moscow was careful not to alienate Iran in its current war with Iraq despite its treaty relationship with the latter.

Thus, Moscow carefully cultivates whatever opportunities may present themselves while Iran remains intact. In the event that Iran splinters into a number of ministates, e.g., Khuzistan, Baluchistan, Azerbaijan, then the Soviets have two options. One is to infiltrate dissident groups in advance of any dissolution. Soviet links with the Tudeh Party are of long standing. The Iranian Government from the time of the Shah's downfall has been aware that many Iranian Marxists who were residents of Eastern Europe were active in Iran. In fact, Mehdi Bazargan accused them of playing a double game in Iran. That is, using the Tudeh Party, they were claiming to support the Iranian Government, but their ultimate game was to seek the "total disarming of the government."[17] Other left-wing groups such as the Marxist Fedayan-e-Khalq are also dependent on Soviet support. The other Soviet policy that may redound to Moscow's advantage is the image of the Soviet Union as a determined and ruthless country with a dramatic capability "to lift and support substantial forces over long distances."[18] Despite the diplomatic flap over Afghanistan, the above image of the Soviet Union could spawn new opportunities for opposition groups seeking internal support.

There are two schools of thought about Soviet intentions. One feels that indeed the Soviets have moved from a defensive to an offensive posrure in implementing their plan to put men and governments pliable to Moscow in charge in various countries.[19] Others, finding the above explanarion to be "ludicrously easy," point to the existence of a debate wirhin the Soviet system that acts ro preserve the collective securiry network. The strategy in the larter case is deemed to be defensive. Its aim, however, is to "deny the West and China additional straregic assets, to acquire such assets for the Soviet Union itself, to engender the 'conrainment' of China and erode U.S. presence."[20] The utlimate goals of Soviet strategy are thus the same irrespective of whether they are arrived at from offensive or defensive intentions. Furthermore, from the regional standpoint, the end

result of Soviet policies is the same, i.e., the denial of the area to Western interests.

Thus, from the point of view of an internal threat to regional interests, Afghanistan sharpened the heightened sense of vulnerability unleashed by the downfall of the Shah. At the same time, however, that regional states became part of the American protective umbtella, they were careful not to appear to do so.[21] In latge measure their reticence was the result of the successful identification by Khomeini, and supported by the Soviets over the years, of the United States with all that is considered illegal and immoral by the indigenous population. Continued U.S. support of Istael further prevented host govetnments, particularly in Arab States, ftom moving into closer open collaboration with the United States.

Regional conditions can be exacerbated by an outbreak of hostilities such as the Iran-Iraq War. While Moscow may not have wished to see that particular eventuality,[22] it did provide the Soviets with opportunities by offering Tehetan new routes for ttade and a tacit understanding of the Soviet presence nominally to counter American policy. While Soviet official neutrality may have had costs in Iraqi resentment, Baghdad already had multiplied its options while Iran needed to break out of the siege imposed by the hostage crisis. In othet words, the gains in Iran were immediate, while those in Iraq were more long term when future opportunities could be exploited to redress that balance.

**The International Context.** Soviet explanations of their invasion of Afghanistan went beyond the purely domestic and tegional factors and put the action in the international context. By stating that "extetnal imperialist forces" had been cooperating with internal counterrevolutionary elements, Moscow put blame squarely on the dootstep of the United States, China, Egypt, as well as Pakistan. The Soviets went so fat as to justify their action on the basis of theit 1978 tteaty with Afghanistan and Article 51 of the U.N. Chattet sanctioning self-defense. Moscow termed its action in Afghanistan a "limited Soviet military contingent" to be used "exclusively for assistance in rebuffing the atmed interference from the outside" that would be "completely pulled out of Afghanistan when the reason that necessitated such an action exists no longer."[23]

Also important in recent Soviet behavior in Afghanistan and surfacing in Soviet interaction with Pakistan has been the element of prestige. Moscow demands recognition as a superpower and the only superpower with legitimate credentials in Asia. In rejecting U.S. charges of Soviet actions resulting because of "temptations offered," Moscow has claimed its status as an Asian power. As such, it would not tolerate the weakening of its position in the Middle East and Southwest Asia,[24] because Soviet strength is matched not only against regional countries, but also the United States. In fact, the Soviets have started to talk of the necessity of forming zones of "neutral states" that provide a buffer on the Soviet southern flank.[25] Since 1969, Moscow has pressed various Asian countries, and those on the southern rim in particular, to sign a collective security agreement as a first step towards institutionalizing Soviet presence to the exclusion of Western and Chinese interests.

The international implications of the Soviet move into Afghanistan were substantive. The Soviets lost hard won prestige with Third World countries, a majority of whom joined in January 1980 at the United Nations to vote 104 to 18 (with 30 abstentions or absences) to condemn the Soviet invasion. Even though Moscow may well have been aware of the ephemeral nature of past condemnation (e.g., against the Soviet

move into Hungary in 1956 and Czechoslovakia in 1968), suspicion of the Soviets may linger awhile because Afghanistan was a nonaligned country outside the Soviet empire. The Islamic conference voted unanimously in January 1980 to sever diplomatic relations, cut off all economic aid to Afghanistan, and withhold recognition from the Babrak Karmal regime until all Soviet troops were withdrawn. Periodic Soviet proposals for legitimizing the Karmal government have gotten nowhere in the face of Pakistan's and Iran's unwillingness to have terms dictated to them. Despite Islamabad's initial willingness to discuss the Afghan situation under the aegis of the United Nations, it seems unwilling to make peace on Moscow's terms, particularly if the price is friendship with China.

Invading Afghanistan cost the Soviets dearly in détente. The United States, in particular, perceived the move as representative of a fundamental shift in Soviet strategy to henceforth seek an alteration of the "correlation of forces" in their favor by undermining the regional and global power of the West.[26] Coupled with the extension of the Brezhnev Doctrine to all self-proclaimed Marxist states, Moscow demonstrated a new willingness to intervene in the Third World as opportunities presented themselves. To counter any such move in an area of vital importance because of its vast energy resources and its access to sea lines of communication (SLOCs), the Carter Doctrine was unveiled on 21 January 1980. As a result, the United States undertook to provide a military shield around the Persian Gulf in order to check Soviet expansion. As an important component of its new policy, U.S. naval presence in the Indian Ocean was augmented and host-nation support actively sought. Furthermore, the United States planned to expand its naval fleet to a 600-ship Navy giving it a capacity to establish a new fleet for the Indian Ocean rather than rely on temporary naval deployments. The Soviet invasion of Afghanistan could also result in the creation of a new command for Southwest Asia. Finally, ratification of SALT II was sacrificed and negotiations for SALT III put off indefinitely. Washington's actions were made more credible because of the shift in public mood regarding Soviet intentions. Soviet actions have played a major role in destroying the "Vietnam syndrome" that precluded U.S. military involvement overseas for nearly a decade.

The process of normalization of Soviet relations with West European nations was also affected. Washington pressed NATO allies to come out strongly and demonstrably against the Soviet invasion of Afghanistan, reminding the West Europeans (and Japanese) that they were even more dependent on Persian Gulf oil than was the United States. Other European issues in East-West relations that were set back for the Soviets were the talks for mutual and balanced force reductions (MBFR) and Soviet attempts to condition European NATO countries into rejecting positioning of *Pershing IIs* and ground-launched cruise missiles (GLCMs) in Europe. Afghanistan, particularly when it was followed so closely by the Polish crisis, strained European détente causing some Europeans to realize that while cooperation with the U.S.S.R. was important, confrontation was still an integral part of the relationship.

Despite its commitment to a new U.S. strategy for Southwest Asia that shifts the burden of regional stability from the "twin pillars" policy of Iran and Saudi Arabia to American shoulders, there is a number of limitations that impinge on American effectiveness. For example, there is general reticence within even the pro-Western nations to become directly involved in anti-Soviet security schemes. Memories of past U.S. inaction linger in the region, as well as violent policy swings that are endemic to the U.S. political system,

make it difficult for the United States to obtain military access. The nations who have thus far offered host-nation support (with the sole exception of Oman) are distant from the center of ongoing crisis.[27]

Additionally, there is the difference between U.S. perceptions of the Soviet threat as constituting the primary threat resulting in the "arc of instability"—as Dr. Brzezinski was fond of noting—from the perception of regional countries who view continuation of the Israeli threat a primary issue of concern. In order to maintain a sustained presence in Southwest Asia, the United States will need additional allies. But it cannot get these regional allies until it demonstrates that its interest is indeed a long-term one. Washington's ability to resolve the above difficulties will influence the tone of Soviet relations with southern neighbors.

**Soviet Options.** Finally, an examination of Moscow's future options in Afghanistan, Iran, and Pakistan as they enhance or detract from Soviet fortunes on the southern tier is in order.

Clearly, the first order of business for the U.S.S.R. is to end the rebellion against the Marxist government in Afghanistan. A successful culmination of the conflict means a Soviet-backed PDPA government in effective control. In order to achieve this objective, the Soviets have to do one of several things: First, escalate the fighting by bringing in additional troops. Estimates of minimally required numbers range around the 250,000 mark. Given this number, the Soviets could then presumably hold the cities and also move to wrest control of the countryside from the *mujahadeen*. This strategy would result in massive killing of Afghans, but presumably the Soviets would be willing to pay the price. They have already been ruthless towards the civilian population. However, the magnitude of the effort should be recognized.[28] While the U.S.S.R. may be able to kill the rebellion in the short run, it would cost a good deal in the long run to maintain the high troop level for occupation. Given Soviet perception of threats via Europe and the PRC, additional troop deployment would involve harsh choices for Moscow. However, it is not a totally imponderable option because the settling of the Afghan rebellion is necessary for full future exploitation of opportunities in Iran and Pakistan.

Secondly, Moscow could continue its policy of fighting the Afghan rebellion at current troop levels. While this would not enhance its present fortunes, it may in the long run provide greater flexibility because it keeps the cost of occupation sufficiently low so as to concomirantly keep up pressure on Pakistan which remains a key to the overall solution. The Soviets could hope for the rebellion simply to fizzle out because of lack of supplies for the Afghan groups, although the *mujahadeen* have demonstrated an ability to sustain the rebellion with elementary arms.

Thirdly, the U.S.S.R. could officially direct its energies at the neutralization of Afghanistan. While France proposed the holding of talks to discuss the prospects of Afghan neutrality as a condition for Soviet withdrawal, the Soviets themselves have coupled any such move with a number of preconditions. Namely, the cessation of all "world aggression" against Afghanistan, normalization of relations with Iran and Pakistan, and the continued existence of the Marxist regime. From the Soviet perspective, if Afghan neutrality is brought within the context of the above requirements then the turmoil in Afghanistan will have been successfully terminated given the fact that Soviet troops would be stationed just across the border. A neutral Afghanistan under Soviet tutelage will buy time for the Soviets to pursue options in Iran and Pakistan without being encumbered by the diplomatic

and military costs of the present Afghan imbroglio.

Fourthly, Moscow could reach a compromise solution to the Afghan problem. In order to do so, the Soviets would first have to admit that opposition to PDPA is genuinely Afghan rather than an internal manifestation of external mischiefmaking. Any compromise formula would have to include Pakistan because 1.5 million Afghan refugees now reside in Pakistan and legitimizing any government in Kabul would require Pakistani concurrence before the Islamic Conference. Islamabad considers compromise to mean a government acceptable to a majority of the Afghan people. So far, Moscow has not shifted its position from its formula calling for a Marxist government that clearly is not acceptable to the Afghan populace. However, if the U.S.S.R. decides that it would prefer to deescalate the conflict, then it may become amenable to a government whose composition allows some PDPA participation but is not controlled by PDPA. A compromise formula would not be much better from the point of view of the Soviet Union than a return to the *status quo ante* that always recognized a special role for the Soviets in Afghanistan. However, there is little indication at present that compromise is uppermost in the minds of Soviet leaders. As one analyst has pointed out, the "operating costs" of Soviet intervention are not high and Moscow has displayed great tenacity in supporting expensive and protracted counterinsurgency campaigns, e.g., Angola and Ethiopia.[29] Soviet notions of prestige may also militate against acceptance of any resolution that does not provide for PDPA (and thus Soviet) control. If Moscow opts for compromise in Afghanistan, it is likely to do so only as part of a larger package that changes the overall tone of East-West relations from their present state of confrontation.

Pursuit of Soviet fortunes in Iran is at present less subject to control than it is in Afghanistan. The longevity of Khomeini's rule impinges on Moscow's options. There are several directions in which Soviet policy could move in Iran. First, Moscow could normalize its relations through an improvement of presently held images of the Soviet "Satan" held by the revolutionary government in Teheran. In a bid towards such an improvement, the U.S.S.R. has offered use of its facilities for trade, kept itself neutral in the Iran-Iraq War, and sent signals that it would like to resuscitate its economic relations with Iran.

A second option that can be pursued simultaneously with the first provides covert Soviet assistance for leftist groups in Iran, including the Tudeh Party. This way, if the Islamic revolution falters, Moscow is in a reasonable position to help these groups achieve power, if not in the central government, then at least in certain parts of Iran, e.g., Azerbaijan or Khuzistan.

Thirdly, in case of a civil war that leads to the splintering of Iran, the U.S.S.R. could provide overt assistance to groups to its liking in order to achieve a government it could manipulate. The Soviets, who have a 1921 treaty with Iran (which justifies Soviet involvement) are unlikely to watch passively if they see Iran change from a friendly bordering state to a militantly unfriendly one. The fact that the Khomeini regime's anti-Soviet stand is tolerated is because of the display of even more intense anti-U.S. feelings in Teheran. Were things to change and the United States once again to become actively involved (either by invitation or because of a deterioration of law and order), Moscow may well decide that in order to keep its southern border calm, it must intercede. This was the rationale for its invasion of Afghanistan and, if the stakes are sufficiently high, it may also be the case in Iran.

The scenario for Soviet activity in Pakistan is even more fraught with

opportunity. Pakistan has been the state most affected by Soviet occupation of Afghanistan and any resolution of the problems Kabul currently faces has to involve Pakistan. Yet, the Soviets find that while Pakistan may put up with a certain amount of diplomatic abuse and occasional border violations, it has so far refused to follow the Soviet (or Indian) line. In order to cut Islamabad down to size, Moscow has a variety of means at its disposal. First, it can continue its pressures to convince Pakistan that continued cooperation with Afghan refugee elements and maintaining a strongly anti-Soviet stand within the Islamic bloc would result in Soviet wrath that, coupled with an Indian response, may destroy Pakistan. The price to be paid by Islamabad in order to escape such a fate would be to accept neutralization.

Pakistani acceptance of the United States $2.5 billion military and economic aid package that provides renewed ties is clearly not desirable from the Soviet point of view. As a result of the American involvement, Pakistan is less subject to overt pressures and threats that make it less tolerant of a Moscow/New Delhi sponsored plan for neutralization. Official acceptance by Islamabad of Washington's aid offer will result in a great deal of propaganda emanating from both Moscow as well as New Delhi. India's position is helpful to the U.S.S.R. because it puts the Pakistani problem in a regional and a bilateral (U.S.-Indian) context rather than simply as a case of East-West relations.

Secondly, the Soviet Union can exploit the opportunities presented by discontent in Baluchistan in order to pressure the Pakistani Government. Any serious threat to the central Pakistani Government from dissident Baluchi or Pathan elements cannot take shape without Soviet support. Delivering the necessary covert support raises the price of Pakistan's pro-U.S. policy without offering a target for an American response.

Thirdly, in the final analysis, the Soviets could physically move into Pakistan from the north, incorporating the Northwest Frontier Province into Afghanistan, setting up an independent Baluchistan in the West, while India moves to integrate Punjab and the Sind provinces into its own boundaries. This scenario is more likely in the face of a U.S. "hands off" policy in Pakistan. American willingness to bring Pakistan into the fold of the total security picture of Southwest Asia, guaranteed ultimately by a direct American presence, will make it harder for the Soviets, alone or jointly with India, to invade Pakistan.

Soviet fortunes in the southern region have improved in the last 3 years. Apart from Soviet control of Afghanistan, a number of opportunities present themselves in Iran and Pakistan. Whether these opportunities are exploited to Moscow's advantage will be determined not only by Soviet wishes and capabilities, but also by prevailing conditions within Afghanistan, Iran and Pakistan, and the place of these countries in the U.S. scheme of things.

## BIOGRAPHIC SUMMARY

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## NOTES

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*We have created the enemy we would like to have, a Soviet Union thirsting for power that it did not intend to use, armed but not anxious to maintain a harmonious world, monotonously boasting about its terrible victories and losses but gratefully learning from our sophisticated negotiators about the nature of modern war.*

*We have of the universe only formless, fragmentary visions, which we complete by the association of arbitrary ideas, creative of dangerous suggestions.*

*Marcel Proust*

# ON CREATING AN ENEMY

by

**Robert B. Bathurst**

If war is too serious to be left to the generals, it is still not obvious to whom it can be left, especially when one is addressing the problem of conflict with the Soviet Union. Since U.S. recognition of the U.S.S.R. in 1934, giving us direct diplomatic observation and access, the misperception of Soviet intentions and capabilities has been so vast on so many occasions by so many of us as to call into question our whole baggage of analysis. We academics, militarists, and diplomats alike may refer scornfully to President Roosevelt's second Ambassador to the Kremlin, Joseph E. Davies (a brilliant trial lawyer, adviser to four Presidents and winner of one of the age's richest heiresses), who pronounced Stalin's show trials in 1937 genuine, but, on the other hand, few of us have reliably escaped falling prey to a Soviet Union of our own creation, either.

In view of our dismal record of predicting Soviet behavior—and apparently their equally poor one of predicting ours—it is odd that we spend so little thought trying to analyze the cultural and professional patterns of our misconceptions. When one realizes the degree to which our preconceptions dominate tactics, readiness, ship design, war scenarios—in short, our capability to perceive and prepare for danger on the most fundamental level—it becomes alarming that we have so little insight into the origin of our ideas about war.

This piece attempts to begin a discussion of our anthropology of war. It proposes to identify some of the recurring patterns of the way in which we perceive the Russians and their threat and to show how we translate that into specific ideas, weapons, and battle scenarios. It is only a sketch of a

vast subject, and one that invites a dialogue with the reader.

**The Pattern of Alarm.** Undoubtedly the orchestrated paucity of information, the Potemkin civilization and the conspiratorial, cabalistic behavior of the Politburo all contribute to the ease with which we Americanize the Bolsheviks. That we do not know what or how decisions are made in the Soviet Union seems to stimulate uncontrolled nationalization. Gorshkov is mistaken for Zumwalt; the Politburo conveniently divides into the good guys and bad guys; fictive elites behave like young Rotarians; and Soviet war plans suspiciously resemble our own.[1] These are the shortcuts we take through the lack of information in order to create the rational actor model of our imaginations, a model who inevitably becomes an American look-alike.

When Franklin Roosevelt concluded that Stalin was a basically good but insecure man, the United States had had only 10 years or so of close diplomatic observation of the Bolshevik leaders' proclivity for the slaughter of their own people. When General Haig permitted himself to express surprise that subversion, sabotage and terror were Leninist principles and practices, he could rely upon nearly 50 years of diplomatic observation. Surely Brezhnev had a right to be indignant that 64 years after the October Revolution, America understood so little about the contest that consumed so much of its intellectual and material energy.

The history of American invention of the Soviets now, after so many years, already describes a somewhat symmetrical pattern of rising and falling alarms, of sprint and drift. Decade after decade, many preconceptions repeat themselves.

For example, there was Roosevelt's formula for winning Stalin's confidence and cooperation. He apparently reduced the entire Soviet problem, and with it the lives of many quiet people, to one mistaken idea: that Stalin would be quite decent if only he were loved. In a formula that one cannot read even half a century later without gasping, Roosevelt revealed a preconception that probably cost millions their lives and freedom. Arguing with his sometime Ambassador to the Soviet Union, William Bullitt, who wanted to take a hard line, he said:

> Bill, I don't dispute your facts, they are accurate. I don't dispute the logic of your reasoning. I just have a hunch that Stalin is not that kind of a man. Harry Hopkins [Roosevelt's wartime emissary to Stalin] says he's not and that he doesn't want anything but security for his country, and I think that if I give him everything I possibly can and ask nothing from him in return, *noblesse oblige*, he won't try to annex anything and will work with me for a world of democracy and peace.[2]

Immediately after the war that the United States, its home front intact, its empire loyal and well-fed, ended with greater power than any nation had accumulated in all of human history, many decisions were made in fear of the massive Red Legions that could sweep across Europe. This was not only a strategic misrepresentation but also a historic fear. Europe had long looked upon Imperial Russia as an industrial weakling but an inexhaustible source of manpower (somewhat the way China is viewed today). The Germans had such fears in two wars. The British and the French incorrectly counted on that insecurity to keep the Prussian juggernaut cautious and contained. The fear was that the countless hordes would surge out of the steppes to ravage Europe. After the war, at the time that these fears were greatest, those Soviet troops that had survived the war and were not being reeducated in Siberian prison camps were apparently too weak

from hunger (even in the Ukraine, according to ex-Premier Khrushchev, the peasants were eating their own children) to reach the Fulda Gap. Speaking of that period, Professor Ulam wrote:

> The Soviet ability to conjure up millions of troops for an offensive war beguiled Western statesmen, yet the fact is that at the end of World War II the total number of men under arms in the U.S. forces surpassed that of the Soviet Union.[3]

By 1950 our fears rose to a new crescendo, this time focusing on the bomber. Known as the "Bomber Gap," this nightmare had the same ring of inventive anxiety that we hear today. The famous NSC-68 of that year, issued by the Policy Planning Staff of the State Department, predicted that by 1954 the Soviet Union would possess the military capability of delivering a surprise atomic attack requiring the United States to have "greatly increased general air, ground and sea strength and increased air defense and civilian defense programs to provide reasonable assurance that the free world could survive an initial surprise atomic attack . . . and go on to the eventual attainment of its objectives."[4]

In the 1950 JCS estimate, it was predicted that the Soviet Union could "overrun Western Europe, drive toward the oil lands of the Near and Middle East, and attack Western SLOC's." In a Blue Ribbon committee report to the Secretary of the Army, there was an equally alarming estimate: "The danger that Russia will overrun Western Europe is the greatest present threat to civilization. The means to stop it do not now exist."[5]

The downing of the U-2 in May 1960 seems to have distracted the nation's attention from bombers. That is what Khrushchev meant it to do when he claimed that bomber attacks against the Soviet Union were doomed to failure and he reminded the world that bombers were "obsolete" and that the Soviet Union could obliterate any countries that might dare to attack it, including America.[6]

His missile rattling, one of the standard methods, as we learned, of his diplomacy, the launch of the first *Sputnik*, the first Soviet ICBM test shot in 1957 (and possibly, too, the return of what appeared to be a recurring 10-year cyclical attack of nerves) contributed to the creation of the "Missile Gap." (It is presumed by many to have helped John Kennedy to gain that half percent that won him the election on the promise that he would get "the country moving again.") In 1963 Khrushchev, whose exaggerations were endemic, cited, for the first time, a specific number of missiles and that was only 80 to 120, a figure so small that it gave the lie to his previous boasts about being able to obliterate the West.

The war in Vietnam and the success in the SALT I negotiations (a success somewhat in the Roosevelt style, granting the Soviets an astonishing 55 percent superiority in launchers) seem to have weakened the cyclical signals around 1970, although the rise of the Soviet Navy was beginning to create its own kind of gap. ("The balance of maritime power is shifting in the Mediterranean," wrote Capt. Giles Upshur, Deputy Chief of Staff for Intelligence on our Navy staff in London.) But by 1979 the patient was responding normally. Team "B" had been created to assure us that we had underestimated the danger, and it performed that task in the style of the many teams, panels and committees that had preceded it. (One, sponsored by the Rockefellers, had boosted Henry Kissinger into his strategic arena.) But as the historical record certainly shows, we did not so much underestimate the military threat as simply not to understand it.

The invasion of Afghanistan occurred in the right year to be noticed. Had it

occurred sooner, there might have been the mildest sort of protest from the United States. How else can one explain our curiously vague initial response to the operations in Angola, Ethiopia or South Yemen, areas of far greater strategic importance, where Soviet officers have succeeded in commanding, or at least coordinating, multilingual, multinational and multiracial forces? That is an impressive capability for a nation that proposes to rule abroad in such a Warsaw Pact-like manner.

What we created in that decade was, of course, the enemy that we would like to have: a Soviet Union thirsting for power that it did not intend to use; one angrily armed but anxious to maintain a harmonious world; one monotonously boasting about its terrible victories and losses but gratefully learning from our sophisticated negotiators about the nature of modern war.

**The Soviet Mirror.** What are some of the corresponding Soviet creations? Surely the main one was, and remains, that Soviet leaders see fantastic dangers everywhere. Many are real ones. With enemies all around them, unable to trust their own people or each other, facing an often hysterical West, with allies who turned into enemies, unfaithful clients, and secure friends nowhere, they could hardly recognize that orderly historical progress that scientific socialism had led them to expect. For them, it is a dangerous world that only a schizophrenic could argue was developing according to Marxist laws.

Between the Treaty of Rapallo in 1922 in which Soviet Russia and pre-Nazi Germany agreed to close and controlled military cooperation and mutual assistance until the bloody German attack of 22 June 1941 was only 14 years. Pledges of eternal friendship and unshakable brotherhood between the Soviet Union and the People's Republic of China sworn in 1949 were shattered together with the skulls of 21 Soviet soldiers killed on the Manchurian border only 12 years later in 1961. While the West thought that it was watching a red monolith in Eastern Europe, the Soviets were organizing for the control of the historically anti-Russian Poles, the coldly disdainful Germans and the unreliable Czechs. Even the impoverished Albanians dared to steal their submarines and show them the door. (While Brezhnev may essay to protect the gains of socialism as much as he wishes, he keeps discovering that one man's protection is another man's colonialism.) Nowhere the Soviets looked did they see dependable allies; nowhere (except in Bulgaria where a major export is the nectar of roses) was there that fraternal proletarian love that was the rock on which socialist internationalism was founded.

The Soviets knew all along that they were living on the future as well as the past battleground, and it frustrated them that the United States, with its seemingly endless abstractions and logical deductions about strategic conflict, did not really understand what war was. Certainly, in 5 to 10 years between the design of a new ship and its launching, democracies could fall, dictators rise, pacts be broken and allies could mobilize. In such circumstances, surrounded by ancient enemies in the most populous countries in the world, few of which had much interest in the American idea of stability, how much was enough?

It is a clue to the Soviet creation that the government functions from the inside of a medieval fortress, the only government in the world to do so, except for that of the Grand Prince of Lichtenstein. And beyond the Kremlin walls there are the rings of security guards for the body and censors for the mind. Then the barbed wire and guard ships, and beyond that, a hostile world. What limit is there to the enemies to be invented? You plug the Czech gap and the Afghan gap and then you become

more aware of those that remain: Turkey, Iran, Japan. And you keep moving your defense perimeter outward with *Kashins*, then with *Krivaks* and *Karas* and *Kirovs*.

The America that the Soviets created, it is safe to say, is scientifically and historically obliged to use power as it was understood in the old imperial days. War was, after all, an accepted way to expand trade, legirimize nations, alter boundaries, confirm superiority and secure a lasting peace. How peculiar our reactions have seemed to Soviet moves in Eastern Europe, Iran, Greece, Korea and Afghanistan, areas of legitimate Soviet and Russian interest of long standing. Why did we assume, the Soviets must have wondered, that a nation would achieve great power and not use it?

It is not, after all, so surprising that America has trouble grasping the essence of the Soviet Union, for ever since 1917 it has been busy creating and projecting an image of itself. Theirs is a world reflected nor in any ordinary mirror but in a tripaneled haberdasher's mirror, image reflecting image to the limit of the eye's patience. And it is an image that by no means sprang ready-formed from the head of Lenin, however much his political descendants—the philosophical ones have long since been purged—would like us to think so. While most nations and societies build their models on some real or imagined qualities within themselves—German efficiency; French intellect; Japanese cohesion; American flexibiliry—the Soviets have built theirs on models cruelly external to rhe Russian nature, and to the some hundred nationalities within the Soviet empire. For 64 years Sovier leaders have been manipularing a metaimage, composed of their noblesr dreams for mankind: equality of town and country, unisexual classlessness, full employment, reliable food supplies. (When Khrushchev promised communism by 1980, the most glowing description he could give was that the bus rides would be free.) But these goals remain almost as remote as they were 60 years ago.

From Lenin's 1918 order to shoot without trial prostitutes and women who distracted the soldiers (Slavic Marxists have generally treated the sexual urge as if it were a capitalist invention for lowering labor and military productivity), followed by Stalin's slaughter of the kulaks and the enslavement of the peasants, the incarceration of the whole population behind the fences, to the expulsion of the Jews and the silencing of the poers, the Soviet leaders have written a black antihistory of their frustration and anger at the refusal of their bewildered subjects to get into the mirror that, when they held it up to nature, did not (as they wanred), reflect an Olympic gold medalist, but only that same suffering population we met in Turgenev and Tolstoy. For that reason the hero-soldier has necessarily replaced the increasingly besotted worker as the model of Soviet achievement.

With so little success in undersranding their own subjected population, there has been little hope thar Soviet leaders would understand us, their capitalist class enemies, any better. With far fewer opinions to distract them from the main line of Marxist thought, Soviets cannot be expected to arrive spontaneously at the conclusion that America is not a threat, any more than we can expect a sudden shift in our military estimates to the posirion rhat the Russians are nor coming. The late Marshal Grechko's assessment had the force of a catechism that undoubtedly serves as the formula for Soviet assessments still:

> The weakening of positions of imperialism and the doom of the capitalisr system intensify the aggressiveness and adventurism of reactionary monopolistic circles. Here and there they provoke

> military conflicts aimed with a cutting edge against the Soviet Union, the entire socialist community and the forces of national liberation. By means of political subversion, blackmail and aggressive wars, the militarists vainly try to overcome the insoluble internal social, economic, and ideological contradictions of the capitalist system, to weaken the world socialist system, and deal with the international working people's and national liberation movement.[7]

**The Horn of Gabriel.** If, as they seem to be, many such delusions and oversimplifications of the 20th century are by now part of the historical record, then where do we look to escape the mirror? Where is the reality that is the corrective of our fragmentary visions? Do we find it in the systems approaches, expert testimony, or study of history?

Apparently not. There is no reason to believe that we are not just as capable of strategic self-delusion as were the French at their Maginot Line or the Japanese at Pearl Harbor. For example, we assure ourselves that with modern electronic devices we can depend upon strategic warning, apparently forgetting our surprise and ignorance that Prague was seized and the Sinai invaded in spite of massive electronic surveillance. Nor, in this dark age, do the political analysts seem to do better. The Shah fell, Afghanistan was invaded, the Polish workers rose and the peasants unionized without benefit of political prediction.

In the 36 years since the end of World War II, the U.S. Navy has not faced a serious adversary in battle. That is a historical precondition for the growth of institutional illusions. We should be cautious. Based upon historical precedent, our admirals must surely be asking themselves if they are preparing to fight the last war instead of the next one. They can, as a point of reference, analyze what can justifiably be called the first modern naval battle. It took place on the night of 6 October 1973, at the very beginning of the Yom Kippur War, on the Day of Atonement.

This was the kind of battle that the Soviets had predicted in the doctrinal discussions eventually revealed in the textbook, *Soviet Military Strategy*, in 1962.[8] It was argued that command and control particularly would be especially complex and critical; the weapons would be missiles and rockets; surprise, more than maneuver, would play the primary role; the battles would be sudden and possibly isolated, not dependent upon a massing of forces. The Battle of the Styx (it deserves a classical name) was in every sense this new kind of naval war, and one that would have been similar if the weapons had been nuclear.

The naval battle was a Soviet model. It was fought to protect the flanks of the invading army and to achieve sea control in a limited area. The Egyptian and Syrian Navies could choose to do battle on their own initiative, surprising the enemy with superior mass. And finally it was, in Soviet terms, a "just" war, if one chooses one of the theoretical formulations that would sound suitably exalted such as a fight for liberation of a nation emerging from colonialism against the reactionary forces of international capitalism.

Finally, the *Styx* missile, carried by either *Osa* or *Komar* fast patrol boats in the Syrian and Egyptian Navies, was presumably the superior weapon against its probable opponent, the *Gabriel* on the Israeli-designed *Saar*-class boats. With a 10 nautical mile advantage, the Arab Navies would have the Israeli forces at their mercy for at least 5 minutes before they could come into position to fire, and that would be at the very edge of their maximum range. Everything seemed set in the Arab's favor. The battle would be, the Soviets must have thought, one of those events predicted by Marxist historians: a progressive product of a proletarian

society defeating the regressive forces of a decaying social system.

The Egyptians must have chosen battle with great confidence. The *Styx* had already proved its worth in the first sinking of a ship by a cruise missile, the Israeli *Elath* in 1967. There was no battle between missiles then. *Elath* was impudently exposing itself off the Egyptian coast, depending for its safety on the overall deterrence of Israeli forces. Still there had been a shock to the psychological balance, as well. The missile had been fired, not by sophisticated Russian advisers, as the naval establishments would have preferred, but by emerging naval sailors. Naval tacticians of all nations had cause to return to their maneuvering boards. If any minimally educated crew could handle the intricacies of missile warfare well enough to win a round against one of the world's best trained, then what areas of the sea did major navies securely control?

If the memory of the sinking of *Elath* was not enough to strike some dread into the hearts of the *Saar* boat crews on their way out to do battle that night, then they had only to think of the deadly accuracy and damage caused by the same *Styx* in the hands of the Indian Navy only a year and a half before in the second Indo-Pakistani war. That was an attack, not a battle, for the Pakistanis had nothing with which to defend themselves except aircraft, and they were, as were the Israeli fighters that night, busy with their own problems ashore. The Indians had shown that the missile could be used to bombard the shore as well as to sink ships. What must have been even more disturbing was the knowledge that nearly all of the missiles fired had found a target. Only one of the four hit empty water where the *Elath* had already sunk.

But this time, in spite of that experience and in the apparent absence of the usual problems associated with Soviet equipment—spare parts and reliability—not one of the some 50 incalculably expensive *Styx* missiles hit its mark; whereas, the Israeli *Gabriel*, with a greatly inferior range, managed to sink much of the offensive arm of both the Egyptian and Syrian Navies and surely the morale of the officers and men as well. They sat out the rest of the war in port while the Israelis occasionally lobbed missiles over the breakwater. What had happened to the "queen of battle" as the old Stalinist Chief of Staff, General Shtemenko, called the new missile and rocket forces?

When asked to explain the basic tactic in a seminar at the U.S. Naval War College, one of the Israeli Squadron Commanders, who had taken a 3-week leave of absence from his course in tactics in order to sink an important part of the Syrian Navy, explained laconically, "The system works. We practiced it and it came off as we expected it to." Perhaps he should have been teaching his instructors.

There were three basic maneuvers, none revealed by that captain, but inferred from other accounts.[9] The *Saar* boats had to close the distance of 10 miles during which they were exposed to the *Styx*. The Egyptians and Syrians, when they were aware that the Israelis were coming, often fired anxiously at the limit of the range of the *Styx* allowing its flight to be subject to maximum interference before it found its target. The Israeli tactic was to make maximum use of that distance for their countermeasures, countermeasures that required the steadiest of nerves in the face of maximum, at least for the first round, danger.

The Israelis had chosen the design of the *Saar* boats with many objectives in mind. They had the luxury of knowing the undoubted scenario in advance. The problem of the *Styx* was foremost. The Israelis traded an inferior range for speed, maneuverability and, most important, for the least possible radar profile. With considerable *sang froid*, they had

to head straight into danger, counting to the split second when to release their electronic decoys. They had ro know exactly when the *Styx* were fired, their speed, and which evasive maneuver to take until they were within range to fire their own *Gabriel*. At that point, the third maneuver would take place: the firing of the *Gabriel* and then a fast turn out of range, and to safety.

To succeed in this engagement, it was necessary for the Israelis to have practiced it, secretly, until their crews could execute it with the precision of a ballet dancer. They had to know, through advance intelligence, ro distinguish from all of the sounds of the cosmos that one distant "click" that must have signaled a rush of blood to their heads as well as the roar of the igniting *Styx* engines. Seldom before had sailors had to perform with such precision, controlled nor by flaghoists or relayed commands, but by a deadly fugue of abstract electronic commands.

Soviet teachers filled their own newspapers and journals with demands for the highest levels of readiness, for overfulfilling training schedules, for knowing the enemy. It is unlikely that they would not have conveyed these axioms to their Arab students or that their intelligence would not have supplied the essential details of the *Gabriel*'s flight. Why did their countermeasures fail? Why of all of their maneuvers was none successful, even in the slightest degree?

History is nearly always written by the victors. The defeated seldom tell their story, or perhaps it is that they are seldom heard. We must speculate why, with a weapon superior in range and a platform also fast and maneuverable, in engagements that they chose, rhe Egyptians and Syrians suffered such ignominious losses without a single hit.

**The Mental Eleetronics of Battle.** Among the possibilities, there is one that is almost certain to be true. It has nothing to do with electronics, and little to do with technology, but everything to do with the creative mind. The Egyptians and the Syrians, and possibly even the Soviets, had obviously not foreseen, when they steamed out intending to sink the Israeli Navy, that any maneuvers would be necessary. With a proven missile having an advantage of 10 nautical miles, they did not expect to face a tactical problem. Such is the danger of superiority. We can imagine that their communications security was poor—what was there to hide?—their morale was high and their preparations were perfunctory. They would have had the confidence of a superior force. That can stultify the mind, as history and sport have so often shown. Inferiority seems to lead to either paralysis or the most daring initiative.

We should not be surprised that the Soviets did not reveal what lessons they learned in the Yom Kippur War. In that land of heroes and endless triumphs, it would be an act of disloyalty to notice that their *Styx* missile cost two allies their navies. We have, however, the right to speculate about what it meant to their theories of war.

That the *Styx* in Arab hands performed disastrously was only a footnote to what was happening on the main battlefield. After initial successes, much Soviet equipment performed badly. It was apparent that Soviet military doctrine and technology needed major adjustments, as did our own.[10]

The way in which the two nations understood that task would, of course, be characteristic of their mental sets. Just as there is a national way of building ships, as Capt. James Kehoe has so conclusively shown, so there is a national way of thinking about war.[11]

In the United States, for example, we think about war very much in the present. We are concerned with solving today's problems, not tomorrow's, and we pay little attention to the lessons of the past, to Vietnam or Yom Kippur,

for example. The Soviets, on the orher hand, focus on future wars and past victories. Unlike us, they do not compulsively dwell on the problems of the present.

There are, of course, many other cultural differences in the way we think about war, but two are especially important. In the United States, we pay little atrention to abstract theories of war. The abstract arguments about nuclear deterrent strategy, largely the creation of academics, were basically ignored in the Navy and greeted with confusion in the Army. Moreover, our armed forces have had to operate without a national strategy or a unified doctrine. The Soviers, however, have both and, indeed, would find it nearly impossible to funcrion without abstract and comprehensive concepts.

There are also culrural and historical differences with respect to technology. In the United States, we tend to expect a technical, instead of a tactical, solution for each new problem. The Soviet assumption, based on their own and the imperial Russian experience, is that they will be using inferior equipment. It is therefore necessary to take measures thar will equalize the difference between rhemselves and the enemy, measures rhat emphasize innovative tactics and psychological warfare—deception, craft, guile—measures that compensate for deficient equipment.

The Soviets, and before them their Imperial Russian forebears, having been long in the inferior position, have shown themselves very adept at innovations, though they have not always led to success in bartle. They were the first to put a cruise missile to sea on a fast patrol boat—missiles have no recoil and thus can be put on small platforms—making the Battle of the Styx possible, and inrroducing fundamental changes in the tactics of naval warfare. The innovations did not srop there. The Soviet Navy also mounred rhe missiles on submarines and other platforms, starting a line of development that led, ultimately, to the remarkable battle cruiser, *Kirov*.

The United States could, of course, have developed as potent a force of naval rockers and missiles. Like the Soviets, our missile program was greatly stimulated by the captured German V-1 rocket, called the *Loon* in its American version, and by the experience of cooperative German scientists. (In 1947, a German V-2 rocket was fired from the deck of the carrier *Midway*.) The *Loon* led to the *Regulus* which was to have a range of 1,000 miles and a speed of Mach 2. Perhaps because it was the descendant of the V-1, the *Regulus* was never thought of as a tactical cruise missile, but only as a strategic weapon. During the period of its development, 1955-1965, our artention was so focused on straregic nuclear weapons rhat we overlooked the practical value of naval cruise missiles and the *Regulus* was dropped.

As one commentator remarked about the *Regulus*, "If the weapon had been considered ro be a replacement for the 11" gun rather than an aircraft, its possibilities might have been more easily perceived."[12]

**Escaping the Mirror.** Armies are temples of ancestor worship, said Basil Liddell Hart in an attempt to explain that kind of behavior. But ancestor worship is nor always self-destructive. There is nothing unique about rhe military's sharing a penchant with its nation for basing its conceptions on powerful recent experiences. For example, not only the Soviet military leaders bur also rhe entire Soviet people were rraumatized by the German *blitzkrieg* of 22 June 1941. Even if their reason tells them that there will not be another war like it, rheir fears force them to be always preparing for one. But the Politburo did show itself to be both wise and original by convening a conference afrer Stalin's death in the late fifties

on the nature of future wars with the idea of avoiding refighting the battles of the past. (It is very likely that some of the success of this undertaking was owed to the browbeating of Khrushchev who saw with a canny peasant's eye that you do not need a battleship to shoot off a missile.)

The result of these deliberations—and not without controversy and dissent—was that rockets and missiles, nuclear and conventional, came to the fore and large ships and bombers, as well as the sainted artillery, receded, at least for a quarter century. The new tactics called for protective clothing (even when there was not enough except for the pictures in *Red Star*), dispersed formations in order to evade nuclear blasts, complex new command procedures to insure the control of remote units, and innovations in communications to survive the new conditions. Immediately the ships, while not the paragons of naval art that the Soviets claimed, began to reflect the new concepts of warfare.

For example, the *Osa* was probably as characteristic of the Soviet view of surface naval warfare as the aircraft carrier was for the United States. Launched in 1961, it was the embodiment of the latest missile technology. It also supported the strategy that was to become the Brezhnev doctrine in which military power was to play some of the centralizing role in international socialism of the old Comintern and Cominform. It could operate in shallow seas on the flanks of the army; it could navigate the open ocean to take station at maritime chokepoints. While it was not designed to patrol coastal waters in a war of liberation, it was, nevertheless, a boat that appealed to developing navies because it gave them a great advantage over their neighbors, as its wide distribution from China to Morocco and Cuba would testify.

While the *Osa* could not challenge an aircraft carrier, it still could capture the imagination. Together with its more primitive *Komar* forebear, it changed naval warfare. At least it changed the calculations of naval power. The firepower of navies was no longer indicated by their deadweight tons. When its missiles would carry nuclear warheads, the little *Osa* could certainly challenge a carrier in an inland sea. Its very presence in the operating area of a navy that, like ours, assumed its enemies were benign would cause a shift of attention from the strategic to the tactical problems of small, modern navies in territorial waters, the growing naval problem of the decade.

Until the Yom Kippur War, appealing to African and Asian navies was easy for the Soviet Union. The naval problems of those nations were not unlike those of the superpower. They needed to defend their coastal zones with ships that could be manned by crews that could be elevated from boot camp through all of the stages of civilization from tribal to electronic. Admiral Gorshkov's reputed motto—excellent is the enemy of good enough—was good for them also. For them also, war was the central concern of existence. Nothing could be taken for granted, neither superiority in weapons technology nor numbers nor even the dependability of the rear.

That the U.S. Navy did not have an answer to the cruise missile before the end of that decade, an era that its only likely adversary had declared as one of rockets and missiles, is an example of the power of national preconceptions. Far from being museums of the past, the naval leaders were simply embodying the national view of war, one that did not recognize the possibility of that kind of battle, one that assumed the only kind of war would be a nuclear one, withour a victory. An enemy was invented whose strategy and tactics made that possible. We had to ignore much of his doctrine on war and revolution for our carrier groups to sail in a Mediterranean

teeming with 150 *Styx* launchers, not having an effective way to stop them.

Those were years in which the United States had, ironically, assumed the roles of the 19th-century Russian tsars, Alexander I and Nicholas I, those emperors dedicated to maintaining the princes of Europe in undiminished power. Our Navy's job was not to win any victory—we had no concept of victory—but to be ready to prevent anyone else's, should that be required. To do that, we assumed a world seeking stability and a Navy to police it. That did not give our naval leaders much cause or inspiration to create tactics. Not required to design war-winning strategies, they were asked only to stand by in case of need. Because that could be anywhere, the Navy was forced to dissipate its energies thinking of all possible scenarios that would fit the national preconceptions. In the meantime, the Soviets were thinking of different kinds of war.

**Uncreating the Enemy.** Lenin and Engels had emphasized that military might was an economic test of the industrial power of the state. (Stalin, Mao and Ho Chi-Min argued, and seemed to prove it, that war was first of all a test of the morale of the rear.) If Lenin and Engels were correct, then the Yom Kippur War tended to show that the socialist bloc, unless it could solve the problems of production, quality control, as well as technological innovation, was probably in an unequal race. Common to all observers was astonishment at the enormous rate of attrition suffered by all participants, not just at sea but also ashore. In less than 3 weeks, equipment was being expended much faster than in any comparable period in history. Some 3,000 tanks were lost, about one third of the number then in NATO. The socialist economies have not shown themselves capable of keeping up in such a race.

And where was the end to it if much of the wealth of the Urals could be destroyed on the sands of the Sinai or sunk on the crest of the Nile with the battle far from decided? If the road to London led through Delhi, as Lenin said, referring to his strategy for cutting the industrial nations off from their raw materials, then it was suddenly going to do so at an astronomical price. It would mean that Soviet predictions of the decay of the West would sound more and more like mirror-imaging as peasants continued to waste their energies in the grim privations of rural serfdom while the proletariat sank deeper and deeper into boredom and drink. In the long run, the Soviet leaders might find, as so many conquerors had before them, that they had dissipated their strength in their farflung outposts while decay set in at home. They had failed to create the world that Marx intended.

For the Sovier Navy, the war must have created a dilemma. The doctrine that had dictated small ships with short ranges and little support for either crews or weapons applied only to adjacent waters. For the rate at which weapons were used up in the Yom Kippur War, for the widely dispersed formations in which modern navies had to operate because of the great accuracy of rockets and missiles, and for their scouting and probing in the scattered socialist empire and the troubled waters of imperialism, the Soviet Navy had to begin building bigger ships. That, too, caused a problem. The Yom Kippur War had certainly confirmed the vulnerability of large electronic targets.

None of this was particularly comfortable for Soviet power. Such a technically advanced navy, operating far from Leningrad and Vladivstok, outside the fences and patrols, could hardly be manned by reluctant draftees from the primitive *kolkhozes* on the steppes. Furthermore, sailing in dispersed patterns put a strain on communications

in wartime and loyalties in peacetime. Opportunities for defection would necessarily increase. The Soviets would insist on sailing their ships, in the Noah formation, two by two, but that would enlarge the target. With the longer missile ranges and consequent looser ship formations would have to come a loosening of command and control, as the Soviets well knew. (That had been one of the first lessons of the Great War of the Fatherland. Moscow could not find out what was happening at the front.) But loosening military control comes even harder than loosening economic control, and Moscow has been unable to do that.

Long ago the Soviets understood that the conditions of modern war make for a very complex command and control problem demanding much greater authority for the local commander than Moscow has ever been willing to grant. Only recently did the U.S. Navy become aware that it faced the same problem. The future wars that the Soviets thought they had to prepare for were ones in which the victor would be he who could switch with maximum speed from conventional to nuclear weapons. And they understood that in order to do so successfully, one had to have not only the choice of weapons in place but also the doctrine of when and how to use them.

The Yom Kippur War seemed to confirm that prediction. Certainly, the time could not be far off when the local commander's estimate would have to include provisions for a switch to nuclear weapons. But in other respects, the war did not confirm Soviet doctrine. Surprise did not win victories; concentration of force presented an easier target to be destroyed; rapid movement in the main direction could only be accomplished with astonishing losses; although in many ways a proxy war, it did not lead to escalation and finally, because of the huge losses, the exhaustion of war materiel, it did appear that the FEBA, the forward edge of battle, could become stabilized and distinct. But whatever they learned, the Soviets did not appear to modify their obsessive image of the *blitzkrieg* war launched by American imperialists. That has apparently remained the given of Soviet estimates.

The U.S. Navy, on the other hand, certainly realized that it had to accelerate its antimissile programs, but beyond the technical level, it is not apparent that the battle had any doctrinal influence. Certainly, even as late as 1976, it was not being discussed at the Naval War College. And the lessons of the Vietnam War were not being discussed there either. Undoubtedly, part of the reason for that was that these were not the kinds of wars for which our Navy was ready. In short, the enemy we created did not fight those kinds of wars, although the enemy he created, did.

## BIOGRAPHIC SUMMARY

Robert B. Bathurst is an adjunct professor of National Security Affairs at the Naval Postgraduate School who will soon return to the Russian Research Center at Harvard to write and research the subject of the anthropology of war. He has served in Moscow as an assistant naval attaché and has studied at the Army Advanced School of Slavic Studies. Professor Bathurst served at sea during his maritime career as a cadet-midshipman during WWII, in the merchant marines and later in the Navy when he was in charge of a communications detachment afloat. The remainder of his career was in Washington, Newport, Europe and Africa.

## NOTES

1. Michael MccGwire, the authority on the Soviet Navy and shrewd observer of the American mind, said that the Soviets make decisions in a perfectly comprehensible way, like the French or the English, but that Americans make decisions—he certainly had the JCS in mind—like Chinese warlords.

2. William C. Bullitt, "How We Won the War and Lost the Peace," *Life*, 30 August 1948, p. 94. As Bullitt's advice had been disregarded and his career curtailed, it is justified to question his account of this discussion. There was, however, an additional confirmation of this same attitude in Frances Perkins' book, *The Roosevelt I Knew* (New York: Viking Press, 1946), p. 383, and in the transcripts of conversations between Harry Hopkins and Stalin in Robert E. Sherwood, *Roosevelt and Hopkins* (New York: Harper and Brothers, 1946).

3. Adam Ulam, *Expansion and Coexistence* (New York: Praeger, 1974), p. 414. Professor Ulam points out that the United Srates had about one million more men under arms than had the Soviet Union.

4. NSC-68 was reprinted in the *Naval War College Review*, May-June 1975. The text quoted is from page 82. The estimate that the Soviet Union could deliver 100 bombs by 1954 was based upon the Soviet bomber force of TU-5s which could not have made the trip. The TU-95, a bomber which can fly from Murmansk to Havana did not make an appearance until May Day, 1955 and by 1956, there were only 135 of them. At that time, we had a huge bomber force, both in the United States and in Europe.

5. Vorhees, et al., "Report to the Secretary of the Army," 19 April 1950, Voorhees Papers. This episode is discussed by Samuel F. Wells, Jr., "Sounding the Tocsio: NSC 68 and the Soviet Threat," *International Security*, Fall 1979, pp. 141-145.

6. See U.S. editors' analytical introduction to V.D. Sokolovskii, ed., *Soviet Military Strategy* (Englewood Cliffs, N.J.: Prentice Hall, 1963), p. 24.

7. A.A. Grechko, *The Armed Forces of the Soviet State*, trans. and published by U.S. Air Force (Moscow: Voenizdat, 1975), p. 347.

8. See Sokolovskii.

9. See, for example, Shlomo Erell, "Israeli SAAR FPB's Pass the Combat Test in the Yom Kippur War," U.S. Naval Institute *Proceedings*, September 1974, pp. 115-119.

10. For a provocative discussion of this point, see Martin van Creveld, "Military Lessons of the Yom Kippur War: Historical Perspectives," *The Washington Papers*, no. 24 (Washington: Georgetown University, Center for Strategic and International Studies).

11. James W. Kehoe, Jr., "Warship Design: Ours and Theirs," U.S. Naval Institute *Proceedings*, August 1975, pp. 57-65.

12. George Alden Sprague, Jr., "A Historical Inquiry into the Development and Appreciation of the Anti-Ship Cruise Missile Concept," Unpublished Thesis, Naval Postgraduate School, Monterey, Calif.: March 1975, p. 27.

*While we may disagree with the implications of what strategy deters, a nuclear strategy must deal with the real emergence of an uncertainty in the strategic environment. Strategies and patterns of force must flow from a concept of what deters, given the physical environment, and must be devised and procured relevant to current and future realities.*

# STRATEGIC UNCERTAINTY AND NUCLEAR DETERRENCE

by

**Donald M. Snow**

Disagreement abounds over the state of the thermonuclear balance, the adequacy of American nuclear forces to deter a potential Soviet aggression or to carry out their assigned mission should deterrence fail, and about the propriety of American nuclear strategy to underpin the deterrent condition. Extraordinary claims and warnings are heard about the purported ability of the Soviet Union to destroy the U.S. fixed-site land-based ICBM force in the early 1980s and the consequent need for alternative ICBM basing[1] and about the need for alternative deterrent strategies, possibly most dramatically represented by Colin S. Gray's recent advocacies of a "war-fighting" strategy[2] and the Carter administration's announcement of a limited counterforce targeting policy (Presidential Directive 59).

This intellectual turbulence has been caused by important changes in the operational environment in which strategy and forces are fashioned. The pace of change has been dynamic and its effects very difficult to analyze and interpret. Differences of opinion in what these changes portend play a large part in the strategic and force configuration recommendations that analysts advocate. Two sources of change are particularly prominent and, because of their importance, require summary examination: the evolving Soviet threat and weapons technology developments.

Concern about Soviet nuclear capabilities stems from the force expansion and modernization program that the U.S.S.R. began in 1967.[3] The Soviets moved from strategic inferiority in the early and middle 1960s to parity and by most measures superiority today. Expansion has occurred in both ICBMs and SLBMs, with particular emphasis on third- and fourth-generation ICBMs (notably the SS-17, SS-18 and SS-19, NATO designations of their three most

recently deployed liquid-fuel intercontinental rockets). Alarm has arisen over vigorous MIRVing and accuracy improvements in their large payload missiles, because such advances on their greater throw-weight rockets potentially endows these weapons with counterforce capability against American ICBMs.[4] These concerns form the basis of the ICBM vulnerability debate and advocated need for the MX missile deployed in a supposedly survivable basing mode.

The major concern about the Soviets is why they have developed the forces they possess. The question is contentious, but one thing is for sure. The Soviet force expansion produced a configuration and capability far in excess of the needs for an assured destruction employment strategy. The possibility that some other motive than assured destruction guided the Soviets shocked many observers who believed the Kremlin had been "educated" to accept American views about nuclear stability. The result was a concerted effort to try to assess Soviet intentions, using evidence from the publicly available literature (in military journals and the like) and pronouncement of leading Soviet spokesmen. Viewing this complex of sources over time and across commentators, this mode of analysis has revealed that the Soviets conceive nuclear weapons very differently from the way Americans do. Rather than basing deterrence in something like assured destruction, the Soviets argue deterrence is maintained by the Soviet ability to fight and win a nuclear war *should deterrence fail*. From this construction, Soviet emphasis on counterforce targeting, preemptive attacks, close integration of conventional and nuclear forces, and civil defense follow.

The degree of alarm this revelation engenders differs among observers and depends on which Soviet spokesmen one emphasizes. Soviet military writers emphasize how the U.S.S.R. plans to fight, win and survive a nuclear war should one begin, and those analysts who find Soviet intentions particularly ominous tend to emphasize this literature (the Soviet civil defense debate is a bellwether).[5] Soviet political leaders, ever since the "peaceful coexistence" enunciation at the 20th Congress of the CPSU in 1956, have emphasized the necessity of avoiding nuclear war. Analysts who make primary reference to these sources tend to downplay the importance of Soviet declaratory policy and to point out the difficulties of inferring intentions from capabilities.[6] Lacking direct access to Soviet nuclear intentions, the debate continues inconclusively.

The fruits of technological development have also stimulated debate. The seminal technological event was the advent of the multiple independently targetable reentry vehicle (MIRV).[7] MIRV allowed warhead proliferation without increasing the number of strategic launchers, and permitted greater target coverage, including both countervalue and counterforce targets. MIRV thus made consideration of attacking retaliatory systems attractive by upsetting the symmetry between attacked and attacking systems (i.e., one could attack several retaliatory systems with a single launcher). Improvements in guidance technology increased missile accuracy, making more serious the ICBM vulnerability problem.

Projected breakthroughs in ballistic missile defense (BMD) through laser and particle-beam technologies would add yet another dimension to this problem.[8] The result of these changes has been to leave nuclear strategy in a state of confusion and disarray for the last decade. The debate has taken assured destruction theory honed in the 1960s as the base and has either attacked its adequacy and attempted to provide an alternative or has tried to modify the basic strategy to changed conditions. What has emerged has been a series of partial, piecemeal, and often "quick fix"

solutions rather than a clear and thoroughly articulated alternative strategy.[9] In the wake of SALT I and the Jackson amendment to its ratification, the term "essential equivalence" entered the lexicon. In 1973, then Secretary of Defense James Schlesinger added the notion of limited nuclear options (LNOs), a throwback to the controlled response idea introduced by Robert S. McNamara in 1962.[10]

The Carter administration repackaged this melange of ideas and partial strategies under the umbrella of a concept coined in 1965, the countervailing principle (the term originally appearing in a research contract report to the Secretary of the Air Force in 1965[11]). As will be argued later, it may prove prophetic that this "principle" originally occurred in a discussion of American response to ABM deployment or adoption of a counterforce targeting strategy. Elevated and elaborated, the principle has become the countervailing strategy, as summarized by former Secretary of Defense Harold Brown:

> Our potential adversaries must be convinced that we possess sufficient military force so that if they were to start a course of action that could lead to war, they would be frustrated in their effort to achieve their objective or suffer so much damage that they would gain nothing by their action . . . . [O]ur adversary would recognize that no plausible outcome would represent a success—on any rational definition of success.[12]

This statement synthesizes previous strategies. The United States must be able to counteract (countervail) Soviet aggression across the range of provocations (limited nuclear options), up to and including a general exchange (assured destruction). Essential equivalence is defined implicitly as the capacity to carry out proportional countermeasures denying the Soviets the ability to calculate gain. The targeting philosophy adopted in Presidential Directive 59 publicly endorsed the counterforce orientation of the 1975 Single Integrated Operations Plan (SIOP) and basically implements the limited options strategy.[13] As Brown himself admitted, "In certain respects, the name is newer than the strategy."[14] These formulations have a certain shopworn character. The question is, need this be the case?

My own answer to the question is in the negative. There has been an avoidance of questioning the assumptions on which nuclear strategy has been based, although events make such an examination appropriate and necessary. The current debate on employment (military) strategy and force composition obfuscates the discussion by leaving those underlying assumptions implicit and unchallenged. Because most discussions have skirted these assumptions, it is worth briefly reviewing them. In essence, the underlying assumptions of assured destruction (and, in the absence of a clearly defined alternative, MAD remains the standard) are an admixture of strategic bombing theory, awe over the destructive capability of nuclear weapons (especially after the introduction of thermonuclear warheads) and resignation to the reality of ballistic missilery.

The late Bernard Brodie described the legacy of strategic aerial bombardment on nuclear strategy.[15] Pointing to such interwar advocates of such theorists as Douhet, the notion arose that bombardment could bypass normal military operations and attack directly the will and ability of the enemy to resist. Although the evidence from the European theater was ambiguous on this contention, the atomic bomb and its employment against the populations of Hiroshima and Nagasaki seemed to vindicate the airpower theorists. Aerial bombardment is inherently an offensive activity, and bombardment theory began to shift doctrine about military employment

from the traditional superiority of the defense toward superiority of the offense. The greatly enhanced destructive power of thermonuclear warheads made the failure of the defense all the more crucial, and the advent of ballistic missilery completed the rise of offense over defense.

Both technological innovations were traumatic and, in combination, helped shape a consensus that deterrence was the prime, if not sole, purpose of nuclear weapons. Thermonuclear weapons increased the damage even a relatively few nuclear weapons could do to the point that "the devastation they would bring if fired would make a mockery of any political goal their use had been intended to achieve,"[16] and these weapons were considerably more compact than earlier nuclear weapons, creating the prospect of delivery by ballistic missiles. Successful ICBMs completed the offense's ascendency, because it was believed that there could be no effective defense against ballistic missiles.

The sure knowledge of devastation meant that the only way to avoid a nuclear holocaust was to prevent the employment of nuclear weapons at all. Deterrence became the goal, and in trying to make the best of a bad situation American strategists evolved the assured destruction concept as the heart of strategy. The heart of assured destruction is Thomas C. Schelling's "hostage effect,"[17] the realization that, in a world where nuclear weapons can be hurled against a population with no prospect of self-defense, target populations are the hostages to the nuclear whims of those possessing the capability. The idea was to make the prospect of a nuclear attack so horrible that a state would not provoke such an attack under any circumstance. The emphasis was placed on the threat that an attack would cause an assured destruction retaliation, thus making the initial attack suicidal.

The key element in this formulation is the *assuredness* of retaliatory devastation. If both the Soviets and the United States know *with certainty* that an attack will result in a crushing counterattack, then neither can ever calculate advantage from initiating a nuclear war and both are deterred. For this absence of incentives to start a nuclear conflict to operate effectively, two conditions that were part of the environment of the 1960s had to be operative.

First, retaliatory forces had to be invulnerable to attack to guarantee their availability should the need arise. To this end, efforts were made to make forces invulnerable (e.g., placing missiles in concrete-reinforced silos and on submarines), and early missiles were too inaccurate to attack protected forces with any reasonable prospect of destruction anyway. Second, surviving retaliatory forces had to be capable of reaching their targets to carry out their retributive function. The ballistic missile's invulnerability to defensive countermeasures seemed to guarantee this. What emerged was a deterrence system based upon the assurance, or certainty, that the use of nuclear weapons would be catastrophic for the initiator of nuclear violence as well as the victim. Knowing that one's own society would be destroyed if one crossed the nuclear threshold made it impossible to calculate gain and hence maximized disincentives. The certainty that one was committing suicide acted as the primary deterrent.

This formulation has always had critics. The strategy has been described as macabre, even genocidal,[18] in its implications. Questions have been raised about whether assured destruction is good for anything but threatening an opponent, possibly best summarized in Richard Rosecrance's statement of the *exante-expost* dilemma.[19] Collins agrees that the threat is only believable against an all-out Soviet attack: "Historical precedents

suggest the survival of the state surpasses all other priorities. Threats that risk suicide for anything less strain credibility."[20] There is another level emerging at which the formulation of strategy is being challenged: the assurance of what the outcome of nuclear conflict would be. Indeed, it is the central contention here that the certainty that has underlaid strategic formulations is giving way to a condition wherein uncertainty in strategic calculation is the dominant reality.

**The Uncertainty Factor.** Although assured destruction appeared to replace calculation of gain with the certainty of a lethal response to aggression, sources of uncertainty have always been present at the edges of this strategy. Uncertainty has always played an important role in military affairs, including nuclear planning, and these "traditional" sources of uncertainty merit brief review. At the same time, emerging weapons technologies heighten the effect of uncertainty and potentially elevate uncertainty to the level of central reality. Most notable among these technological trends are improving ballistic missile accuracies and ballistic missile defenses.

**"Traditional" Sources of Uncertainty.** The conduct of warfare has always contained uncertainties. The decision to engage in military hostilities requires assessing likelihoods of success, including weighing imponderable factors, not the least of which is the influence of weapons systems previously unused in combat. In specific nuclear terms, there are conceptual uncertainties about basic concepts and dynamics relating to nuclear balance and even about the physical effects of nuclear weapons employment.

Whenever any weapons system is initially employed in battle, its effect is to some extent unknown. If there has been any consistent pattern in the 20th century, it has been to estimate inaccurately what the effect will be.[21] The history of the bomber airplane, particularly in speculation about the role aerial bombardment would play in World War II, is indicative. Although the bomber ultimately played an important role in concluding that conflict, it was only after considerable adjustment of expectations based on operational experience.[22] This difficulty of prediction arises because a new weapons' effectiveness is no greater than the ability of its human operators. As Panofsky puts it: "Those who demand certainty of performance and reliability in military weapons tend not to acknowledge the least reliable and predictable component of military conflict, which is *man*." (Emphasis in original.) This is particularly a problem with new weapons qualitatively different from their predecessors, as nuclear weapons certainly are. As Panofsky suggests, "The unpredictability of behavior of human populations under stress, the vastness and uncertainty of the large-scale effects of nuclear weapons, and above all the abilities of 'rational' governments to control the course of a nuclear conflict all tend to submerge the importance of formal doctrine or goals."[23]

The suggestion about human behavior in a nuclear environment is indicative of the uncertainty we have generally about the basic concepts and dynamics regarding nuclear deterrence; the empirical base on which "theory" about human behavior in a nuclear conflict is founded is exceedingly thin.[24] Moreover, the study of deterrence is dedicated to avoiding enlarging that base, as only the failure of deterrence can provide authoritative information on key points. Thus, high-sounding concepts are only hypothetical constructs for which virtually no reliable evidence is available. This problem pervades the strategy that is based upon these constructs.

Despite elaborate studies,[25] there is great uncertainty about the physical

effects of nuclear weapons usage. Arsenals are enormous, and even though not all weapons are available for use and some would be destroyed, the result of employing those available would be enormous and is a further source of uncertainty. Adding the combined superpower strategic arsenals aimed at one another (about 15,000 warheads) to their reported "tactical" arsenals in Europe (reported at around 7,000 warheads for the United States and about half that many for the U.S.S.R.) results in an awesome potential rain of destruction even if only some are available at any time. Despite elaborate studies of weapons effects, there is no realistic way to judge the physical results of unleasing these arsenals.

This very real uncertainty is beclouded in at least two ways. First, estimates of weapons effects based on nuclear testing data appear so elegant and precise as to defy either refutation or questioning when extrapolated. It is, in other words, very difficult to deal with the mathematical precision that these calculations produce. Second, the results are generally so horrible that people avoid thinking about them. Shrouding bomb effects with antiseptic notions like "blast overpressure" and "thermal" effects obscures the absolute horror that would be inflicted in a nuclear exchange. The massive detonation of nuclear arsenals into which an exchange could devolve goes beyond our theoretical understanding. Testing data can reveal the effecrs of a single nuclear weapon delivered at a given place and we can extrapolate those effects to the use of a few weapons without overly prostiruting its assumptions. At the same time, no models in which one has any reasonable level of confidence exist that allow estimation of the effects of using several thousand weapons in a more or less concentrated area. The effects curve is undoubtedly not linear, but no one can more than causally speculate on the curve's actual shape.

An example relevant to the next section illustrates the point. To provide a "survivable" basing mode for the new MX missile system, the so-called multiple protective shelters (MPS) system, in which 200 missiles are shuttled among 4,600 locations, has been proposed. The deterrent logic is that the Soviets could only destroy MX by launching warheads against all the shelters. The system dissuades attack because the number of warheads that would have to be launched against it would be so large as to leave Soviet reserves depleted so that the postattack balance would overwhelmingly favor the United States. Thus, deterrence is premised on making it too expensive to attack the missiles.

Implicit is that the Soviets can destroy MX-MPS if they are willing to incur the costs. To do so would necessitate hurling at least 4,600 warheads at the MPS fields, an attack of unprecedented proportions whose desrructiveness would be almost incomprehensible. What would the physical effects be? Would the force disrupt rhe atmosphere, affecting the ozone layer, the jet stream, or possibly wind current patterns? Would the crystallization of much of Utah and Nevada, including their mineral contents, cause changes in the earth's gravitational fields? Could the force of such an explosion affect the earth's rotation or attitude? What effecrs on the world's weather would the resultant dust cloud have? An all-out attack on *Minuteman* silos spread across several states could have any of these effects: against MPS the effects would be physically concentrated and magnified.

These questions affect the ability of man to survive after a nuclear exchange, and their answers could prove critical ro determining whether initiating a nuclear exchange would ever make any sense. Unfortunately, rhe answer is that

we do not know. There is certainly no equivalent phenonmenon in nature from which to draw analogies, and extrapolation from existing testing data is tenuous at best. All that can be said is that such an event would be unprecedented. What cannot be predicted is what the consequences would be.

**New Tcehnological Sources of Uneertainty.** Nuclear scenarios and appropriate strategies for the 1980s and beyond are faced by emerging technological capabilities which, despite other claims made for them, compound uncertainty. The two most prominent technological trends have been increased missile accuracy to counterforce capability and potential breakthroughs in ballistic missile defenses. Each represents a qualitative improvement in weapons systems sophistication, but their effect on nuclear strategy depends upon great precision in performance with little tolerance for error. The ability to accomplish the necessary performance characteristics introduces a new source of uncertainty, which will be described as the "targeter's dilemma."

*Missile Accuracy and ICBM Vulnerability.* Increasing Soviet missile accuracies have caused a great concern in the American strategic studies community and are part of a broader trend poinred out by Brodie some years ago: "If there is any single trend that seems to dominate in weaponry, it is for missiles of all kinds to become more accurate and more deadly."[26] Specifically, increased accuracy theoretically allows targeting of the easiest retaliatory system at which to aim: the fixed-site, land-based ICBM force. To understand the problem created by this theoretical capacity requires asking first what the capability's value is, which, in turn, defines the requirements for so-called "hard" counterforce capability. Those requirements highlight the uncerrainty that attainment of the capability represents.

The most obvious reason to attain counterforce capability is to threaten credibly to destroy that portion of an enemy's retaliatory forces under threat or to be able to destroy those capabilities before they can be used against you. Thus, the purpose of a counterforce capability is either to degrade substantially or disarm an opponent, thereby effecting damage limitation on your side. This ultimate goal of damage limitation can be achieved in two ways. The most obvious is to disarm an opponent so that no forces remain to inflict damage on you. Failing in that, the purpose is to degrade an enemy's force to the point that after an attack, the adversary will conclude that he is disadvantaged in remaining forces and will thus be self-deterred. In either case, success is measured by how much of the adversary force you can destroy. Given arsenal destructive characteristics, a relatively small residual force can do a great deal of damage. Thus a high degree of confidence in counterforce capability is necessary to make the strategy attractive.

From this perspective, precision in execution and high belief in that precision are the necessary preconditions in convincing leaders to accept the strategy. Conversely, uncertainty about the ability to succeed makes the strategy less appealing by raising the prospects of remaining retaliatory force after an attack. Secretary Brown admitted in 1978 that uncertainty is a key element in the vulnerability issue: "In recognizing that the MINUTEMAN vulnerability problem is a serious concern for us, we also realize that the Soviets would face great uncertainties in assessing whether they would have the capability we fear—and still greater uncertainries as to its military and political utility."[27]

The heart of uncertainty regarding counterforce capability is that it is a theoretical rather than a demonstrated capability. The capability is theoretical in that neither side has nor ever will

conduct realistic tests of the ability to mount a massive attack on missile fields. Rather, the capability must be extrapolated from numerically limited test data which are themselves questionably isomorphic of the "real thing."

There are two key elements in determining counterforce capability: the accuracy of the weapons system and whether it explodes where it is intended to. The heart of accuracy lies in the concept "circular error probability" (CEP), defined as the radius around the target in which one has a 50 percent confidence that a warhead will land. CEP is measured in fractions of miles, and is the denominator in formulas calculating the lethality of weapons. Reduction or increase in CEP can thus have a dramatic effect on lethality calculation. CEP as a confident measure of kill probability (either single-shot or cumulative) is a questionable calculation base for two reasons.[28]

The first problem is that CEP is a statement of statistical probability which says something like "if you fire a large number of warheads at a target, 50 percent will fall within the designated radius." A statement of statistical probability says *nothing* about whether a single launch will land within the radius (or the second, as implicitly assumed in cross-targeting, which assumes one can dramatically improve kill probabilities by dedicating a second warhead at a target).

Additionally, there is reason to question the precision of the test data on which CEP is based as it would apply to a real exchange. The United States, for instance, has never tested a missile armed with a nuclear warhead. Testing by both sides is generally done over east-west test ranges and largely over land, whereas a nuclear exchange would be north-south over the North Pole and thus the Arctic Sea. Although there are theoretical data indicating likely success for missile flights in these circumstances, success is undemonstrated. For example, flight over water can pose unique gravitational problems: "The accuracy of a missile depends on the precise gravitational field through which it flies. Since the land is far more rigid than the sea, this field is much less affected than by tides raised by the moon and the sun in an ocean environment."[29]

The second calculation problem is fratricide, the possibility that the effects of previous nuclear explosions over a target area will disable subsequent warheads heading for the same area.[30] The problem is acute in calculating an attack against missile silos, because a large number of warheads, fired in barrages, would have to be directed at these complexes in close sequence. Initial attacks would produce considerable nuclear effect in the upper atmosphere through which subsequent warheads would have to penetrate: heat, blast, radiation, and debris. The effect is difficult to predict because fratricide effects have only been observed underground. Calculations tells us that fratricide will occur, but "since there have been no atmospheric nuclear tests since before multiheaded missiles were invented, neither superpower knows for sure if the first warhead will disorient its brothers."[31]

None of these problems would be overly important against "soft" counterforce or countervalue targets, given the destructive capacity of nuclear weapons. Against hardened retaliatory forces, failures in precision can result in great amounts of retaliatory power being released because of error.

*Ballistic Missile Defenses.* The idea of ballistic missile defense has begun to find its way back into strategic discussions. This reemergence is partly the result of continuing advocacies by apologists who never accepted the idea of abnegating the defensive function and of ongoing improvements in ABM technologies. The increasing possibilities of dramatic breakthroughs in exotic

BMD technology, notably lasers and particle beams, offer the potential of dramatic improvements in defense against a missile attack. Advocacy of BMD more went underground than disappeared in the wake of the ABM debate. Research and development of ABM systems have been ongoing, and there has been considerable progress in such areas as radar tracking and discrimination between actual attacking missiles and decoys. The result has been the emergence of theoretically effective missile defense systems, notably the proposed LoADS (Low Altitude Defense System), a "hard-point" defender inrended for interception of ICBMs aimed at MX missiles in the MPS configuration. BMD advocacy has been further stimulated by defensive applications of directed energy transfer weapons research.

When the ABM debate occurred, three related arguments were made against active missile defenses. The first was the effecriveness of the systems. Wide disagreement among experts about how well ABM would work left a lingering public doubt. Second, cost estimares for erecting an ABM defense were quite high and seemed a particularly questionable investment for a system of dubious effectiveness. Third, and emerging primarily from assured destruction advocates, was a concern that defenses would be destabilizing. According to this objection, ABMs potentially weaken the hostage effect by raising the possibility of surviving nuclear war. Just as ICBM vulnerability made retaliatory system survivability questionable, missile defense challenges penetrability and retribution. In either case, the *certainty* of disastrous effects from launching a preemptive attack is weakened.

The attractiveness of BMD depends on how effective such a system must be to become worthwhile. The answer to that question depends on what one seeks to defend with BMD. The distinction, of course, is between population and retaliatory systems protection, and the operational requirements vary depending on the target one seeks to protect.

The requirements for defending retaliatory forces are less stringent than those for population concentrations, particularly given the size of modern arsenals. The reason is straightforward: to avoid urban destruction, a defense must be virtually perfect, inasmuch as the failure to intercept even a single incoming RV can result in massive destruction. Thus, population protection with active defenses has absolute requirements: one either can or cannot protect the population from attack. If one cannot guarantee population protection, the effort is questionable, especially if the costs are substantial (which they invariably are). Retaliatory systems defense, on the other hand, is an incremental proposition. Because the purpose of attacking retaliatory systems is their maximum degradarion (ideally to the point of disarmament), any interception of incoming RVs contributes incrementally to force survivability and hence availability for retribution. The greater the incremental contribution and hence the amount of retaliatory force surviving, the greater the deterring effect on a potential attacker.

Within this context, BMD advocacy is moving in two directions. Reflecting the technological state-of-the-art, short-term advocacies center on so-called "hard-point" defense: "A point defense, to protect a missile silo (for example), would consist of short-range missiles deployed near the rarget and intended to counter only those warheads that appeared to be jeopardizing the target."[32] The LoADS projecr is a prime example and has been suggested as a solution to the ICBM vulnerability problem. Longer-range advocacies center on defensive applications of the so-called "exotic" DET technologies. Although actual deployment of these technologies

is probably a decade or more away, they have been the subject of great acclaim and reservation.[33] Much of the debate centers on uncertainty about the final outcomes of developmental processes, because "it is characteristic of exotic systems that they probably do not work at all, but if by any chance they do work they may be spectacularly better than conventional ones."[34] Optimistic projections assign DET weapons comprehensive counterforce and countervalue defensive roles. These assessments feature space-based DET platforms engaging in boost-phase interception of rising missiles because "of the vulnerability of missiles at this srage"[35] (before they have reached maximum speed and can maneuver effectively). Some proposed schemes combine point defenses composed of DET-based weapons or conventional or nuclear-tipped ABMs with space-based systems in a "layered" defensive system.

The emergence of truly effective (in a population protection sense, essentially airtight) BMD would indeed revolutionize strategic thinking. Formidable problems in areas such as radar detection, tracking and protection (the "eyes" of a defensive system always being their most vulnerable element) must be overcome, as well must the challenges posed by countermeasures to whatever capabilities emerge. Even if all the formidable difficulties are surmounted (which is by no means certain), ballistic missile defenses will share a common problem with projections regarding missile accuracy and counterforce capability.

That problem is that the effectiveness of BMD will also be theoretical and not demonstrated. As systems are developed, the testing will always be limited and incomplete, as with ICBM testing. A laser device, for instance, may repeatedly show the capability to destroy a handful of incoming reentry vehicles, but does that mean the results can be extrapolated to predicting success if thousands of warheads were incoming? The answer is that we can only really know by conducting realistic tests on a scale that is impractical on cost grounds alone.

The result is that there would always be subsrantial uncertainty about the actual performance of a BMD system. Some degradation would seem almost inevitable, because "rhe whole of the immensely complex system would have to function almost perfectly on the very firsr occasion on which it was used, without any possibility of full system trials."[36] Some loss of effectiveness may be tolerable when dealing in an incremenral prorection situarion, but would be unacceptable in population protection, with its absolute requirements.

*The Targeter's Dilemma.* The calculation of the outcomes of nuclear weapons employment is a special problem of the targeter. Targeting provides the operational answers ro what national policies can and cannot be implemented through various patterns of weapons employment and what can and cannot be achieved through nuclear weapons employment. The key targeter's concept in these estimations is damage expectancy (DE), rhe likelihood that a weapon will destroy its targer. DE is the producr of the probability of arrival (PA) of a weapons system to the targer area and the probability of target destruction (PD) and is calculated by the formula:

$$DE = PA \times PD$$

The PA and PD factors in the formula, in turn, are compound expressions. Examining the composition of each factor and the whole reveals the very real uncertainries which make up the targeter's dilemma.

Probability of arrival (PA) comprises four factors and can be expressed by rhe formula PA = WSRxWRxPLSxPP. WSR (weapons systems reliability) refers to the working order of the delivery system. The ability of a rocket to ignite, escape its silo or missile tube, and adopt the proper trajectory and posr-boost phase atritude are operations

that must occur properly for a system to be reliable. Weapon (or warhead) reliability (WR) refers to the warhead itself and whether it will detonate. Periodic checks are made against materials degradation, but such testing is highly selective. The physical state of the entire warhead inventory is unknown at any time, but is extrapolated from test/observation data. Prelaunch survivability (PLS) is the ability of a system to remain operable after an attack and is the targeter's operationalization of the vulnerability issue. Probability of penetration (PP) is the ability to overcome any active defenses and is the obverse of the effectiveness of ballistic missile or air defenses.

The other factor is probability of rarget damage (PD). PD is a function of two elements: the lethality of the weapons (see nore 28) and the resistance (or hardness) of the target. Lethality varies depending on the type of target (e.g., blast overpressure against structures, radiation against people) and is related directly to target hardening. The combination of yield and accuracy determines the likelihood a target will be destroyed, with particular emphasis on accuracy. The prime means of determining accuracy is CEP, with the resulting uncertainty that enters into the calculation process.

Several things affect the ability to calculate likelihoods of mission accomplishment. First, the formula is multiplicative, with all factors expressed as percentages. The upper limit of a damage expectancy is 100 percent or unity (1.0) if all the probabilities are unity. If any or all factors are less than unity, the multiplicative nature of the formula makes the effect on overall damage expectancy progressive. Second, this multiplicative nature of the process means that a large decrease in *any* factor in the formula will have a dramatic effect on overall damage expectancy.

The ICBM vulnerability issue illustrates these points. For instance, if one is calculating the damage expectancy of the ICBM force against its targets and assumes a Soviet preemptive launch against the ICBMs would knock out 75 percent of them, then PLS for that force element is 25 percent, and damage expectancy is only one-quarter what it would be otherwise. Because a statemenr of statistical probability is invalid for any individual instance, the methodology can be applied validly only to an aggregate of weapons systems. Thus, the likelihood that a given warhead will land within the CEP is either 100 percent or zero percent (it either will or will not), but one cannot predict in advance into which category a particular warhead will fall.

Third, the basis for DE formula elements is sample data which is assumed to be representative but may or may not be so. Thus, some percentage of warheads is examined periodically for reliability, and the percentage found reliable forms the basis for calculating WR for any given warhead. Sampling techniques allow a high degree of reliability within some confidence interval that the sample represents the universe, but a precise isomorphism is not possible.

If calculating DEs for our own systems is fraught with uncertainties, the process for estimating Soviet force effectiveness is even more difficult. The weighing of facrors in one's own formula is at least based on observation and testing, but the assignment of values to Soviet force characteristics is based on less precise information. The Soviets do not, for instance, allow us to examine rhe warheads on their missiles for reliability, so we have less than perfect information on which to assign a WR value to Soviet forces. This is a crucial point when one considers that the frequent assertions of U.S. ICBM vulnerability are based on damage expectancy calculations that we assign to Soviet forces.

The new technological capabilities already discussed compound these

uncertainties. If recent statements by Secretary Brown and others are to be believed, PLS for American ICBMs is becoming virtually nil, but such assessments are in turn based upon damage expectancies, based on theoretical calculations. Within these circumstances, what PLS can be assigned to the ICBMs in which one would have confidence? Similarly, any developments in BMD directly affect PP, and the deployment of a BMD system would require a reduction in PP (which, in the absence of BMD, is 1.0). But, because reliable test data against a large-scale attack will always be unavailable, what magnitude of reduction should there be? Neither question can be answered with high confidence. There is, however, considerable disagreement over the most appropriate and effective strategies to carry out the political purpose and over appropriate action should deterrence fail. The Soviets maintain that deterrence of an American nuclear aggression is accomplished through our sure knowledge that they would prevail in the ensuing war (the vaunted war-fighting and war-winning strategy). Until recently, the United States has countered with the proposition that assured destruction deters a Soviet aggression. The U.S. strategic debate has hinged on the credibility of the assured destruction threat. There is growing agreement that assured destruction no longer forms an adequate deterrent base. What has emerged is a new and purportedly more realistic base to avoid the onset of nuclear conflict under the countervailing strategy concept.

This "new" strategy is a lineal and nearly literal descendant of controlled response under the early Kennedy administration and Secretary Schlesinger's limited nuclear options strategy in the early 1970s. It posits deterrence in a slightly different mode than has previously been the case, following closely from Collins' description of "sound deterrence," which "confronts foes with irrefutable indications that net gains will be less or net losses more than they would expect by refraining from some given move."[37] Faced with a broad range of possible Soviet provocations and formidable forces, this definition is translated into a strategic imperative to deal with situations that could lead to war. As Secretary Brown puts it, "Crisis stability means that even in a prolonged and intense confrontation the Soviet Union would have no incentive to initiate an exchange, and also that we would feel ourselves under no pressure to do so."[38]

The underlying principle of this deterrence conception is not remarkably different from that which it supersedes: creating an assuredness that no conceivable Soviet action can succeed. Translated to the operational level, Gray captures the underlying philosophy of this view: "*One of the essential tasks of the American defense community is to help insure that in moments of acute crisis the Soviet general staff cannot brief the Politburo with a plausible theory of military victory.*" (Emphasis in original.)[39]

One can, and many do, disagree with the implications of this reconstruction of what strategy deters, particularly when that strategy is translated into a war-fighting military strategy or a counterforce targeting priority, as

## BIOGRAPHIC SUMMARY

Donald M. Snow, Associate Professor of Political Science at the University of Alabama and Visiting Professor of National Security Affairs at the Air University, received his Ph.D. at Indiana University. He has recently published *Nuclear Strategy in a Dynamic World: American Policy in the 1980s* and has edited and contributed to *Introduction to World Politics: A Conceptual and Developmental Perspective* and *Readings in Nuclear Strategy Making.*

announced in PD-59. More basically, however, nuclear strategy must deal with the very real emergence, through advancing military capabilities, of the influence of uncertainty on the strategic environment. Gray's imperative is the obvious goal. The question is how to achieve it. One answer is the buildup of American strategic forces as broadly advocated and as supported by adherents of a war-fighting strategy. Another answer, possibly in conjunction with the first, is to emphasize the targeter's dilemma and the possible consequences of being wrong. Strategies and patterns of force must flow from an overall conception of what deters given the physical environment. Strategy and forces fashioned in a situation where certainty was the prevailing reality may not prove adequate in an increasingly uncertain world. It is imperative that underlying premises be examined before strategies are devised and forces procured that may or may not prove relevant to current and future realities.

## NOTES

1. The issue of ICBM vulnerability has been treated extensively in the recent literature. I have addressed the issue in *Nuclear Strategy in a Dynamic World: American Policy in the 1980s* (Tuscaloosa: University of Alabama Press, 1981), pp. 96-99 and 205-216 and in "ICBM Vulnerability, Mobility and Arms Control," *Air University Review* (forthcoming). Colin S. Gray has been a leading clarion of the danger, represented by his "The Strategic Forces TRIAD: End of the Road?" *Foreign Affairs*, July 1978, pp. 771-789, and *The Future of Land-Based Missile Forces*, Adelphi Papers, no. 140 (London: International Institute for Strategic Studies, Winter 1977). Articulate, but somewhat technical, expressions of some skepticism, include John D. Steinbruner and Thomas M. Garwin's "Strategic Vulnerability: The Balance between Prudence and Paranoia," *International Security*, Summer 1976, pp. 138-181; and more recently, Bruce William Bennett's *Uncertainty in ICBM Survivability*, Rand Paper Series No. P-6394 (Santa Monica, Calif.: Rand, October 1979). For more descriptive discussions, see U.S. Congress, *Counterforce Issues for the U.S. Strategic Forces* (Washington: Congressional Budget Office, January 1978); and Deborah Shapley, "Technology Creep: ICBM Problem a Sleeper," *Science*, 22 September 1978, pp. 1102-1105.

The MX issue has also received considerable attention. My own views are in "The MX-Basing Mode Muddle: Issues and Alternatives," *Air University Review*, July/August 1980, pp. 11-25. For representative advocacies of the system, see Colin S. Gray, "The MX ICBM: Why We Need It," *Air Force Magazine*, August 1979, pp. 66-68, 71; Lawrence J. Korb, "The Case for the MX," *Air University Review*, July/August 1980, pp. 2-10; and Edgar Ulsamer, "A Solid Case for the MX," *Air Force Magazine*, April 1980, pp. 29-35. For more skeptical views, see, for instance, Desmond Ball, "The MX Basing Decision," *Survival*, March/April 1980, pp. 58-65; William H. Kincade, "Will MX Backfire?" *Foreign Policy*, Winter 1979-1980, pp. 43-58; and Paul D. Zimmerman, "Will MX Solve the Problem?" *Arms Control Today*, January 1980, pp. 6-8. For a description, see U.S. Congress, *The MX Missile and Multiple Protective Structure Basing: Long-Term Budgetary Implications* (Washington: Congressional Budget Office, June 1979).

2. Gray has presented his ideas recently in "Nuclear Strategy: The Case for a Theory of Victory," *International Security*, Summer 1979, pp. 54-87; "Targeting Problems for Central War," *Naval War College Review*, January-February 1980, pp. 3-21; and (with Keith Payne), "Victory is Possible," *Foreign Policy*, Summer 1980, pp. 14-27. P.D. 59 was referred to by Secretary Brown in his speech at the Naval War College Convocation in August 1980. See Harold Brown, "Remarks at the Convocation Ceremonies for the 97th Naval War College Class, Naval War College, Newport, Rhode Island," (Washington: Office of Assistant Secretary of Defense (Public Affairs), August 20, 1980).

3. This subject has produced a torrent of literature in recent years. My own view and conclusions can be found in *Nuclear Strategy in a Dynamic World*, Chap. 5 and pp. 216-223. A sample of authors and points of view includes: Robert L. Arnett, "Soviet Military Doctrine: Views on Nuclear War," *Arms Control Today*, October 1978, pp. 1-3; Les Aspin, "Putting Soviet Power in Perspective," *AEI Defense Review*, v. 2, no. 3, 1978, pp. 3-14; David J. Cabe, "Russian Military Doctrine: A Fresh Look," *Air University Review*, September/October 1978, pp. 19-27; John Ericksen, "Soviet Military Policy in the 1980s," *Current History*, October 1978, pp. 97-99, 135-138; Leon Gouré, et al., *The Role of Nuclear Forces in Current Soviet Strategy*, (Miami, Fla.: Center for Advanced International Studies, 1974); Colin S. Gray, "Soviet-American Strategic Competition: Instruments, Doctrines and Purposes," in Robert J. Pranger and Roger P. Labrie, eds., *Nuclear Strategy and National Security: Points of View*, (Washington: American

Enterprise Institute for Public Policy Research, 1977), pp. 278-301; William D. Jackson, "The Soviets and Strategic Arms: Toward an Evaluation of the Record," *Political Science Quarterly*, Summer 1979, pp. 243-261; C.G. Jacobsen, "Soviet Strategic Capabilities: the Superpower 'Balance,'" *Current History*, October 1977, pp. 97-99, 134-136; T.K. Jones and W. Scott Thompson, "Central War and Civil Defense," *Orbis*, 1978, pp. 15-36; Benjamin S. Lambeth, *The Elements of Soviet Strategic Policy*, Rand Paper Series, No. P-6389 (Santa Monica, Calif.: Rand, September 1979); William T. Lee, *Soviet Defense Expenditures in an Era of SALT*, USSR Report 79-1 (Washington: U.S. Strategic Institute, 1979); Michael MccGwire, "Soviet Military Doctrine: Contingency Planning and the Reality of World War," *Survival*, May/June 1980, pp. 107-113; Richard Pipes, "Why the Soviet Union Thinks It Can Fight and Win a Nuclear War," *Commentary*, July 1977, pp. 21-34; and Jack Snyder, "The Enigma of Soviet Strategic Policy," *The Wilson Quarterly*, Autumn 1977, pp. 86-93.

4. Throw-weight (or payload) is that part of a missile above the last booster. Counterforce (or hard-target kill) capability is the capacity to destroy military targets that have been hardened against attack, as in missile silos.

5. The debate over the effectiveness of Soviet civil defense programs and how seriously the Soviets take them has been heated. T.K. Jones and Leon Gouré have been leading aposties of the problems created for the United States and a range of experts have attacked these conclusions. For a summary of these positions, see Fred M. Kaplan, "The Soviet Civil Defense Myth," *Bulletin of the Atomic Scientists*, March, 1978, pp. 14-20, and "The Soviet Civil Defense Myth: Part II," *Bulletin of the Atomic Scientists*, April 1978, pp. 41-48 for the negative arguments; and Leon Gouré, "Another Interpretation," *Bulletin of the Atomic Scientists*, April 1978, pp. 48-51 for the positive position.

6. For a particularly eloquent analysis, see Raymond L. Garthoff, "On Estimating and Imputing Intentions," *International Quarterly*, Winter 1978, pp. 22-32.

7. For a particularly thorough analysis, see Ronald L. Tammen, *MIRV the Arms Race: An Interpretation of Defense Strategy* (New York: Praeger, 1973). The decision process leading to the MIRV decision is well chronicled by Graham T. Allison, "Questions About the Arms Race: Who's Racing Whom? A Bureaucratic Perspective," in John E. Endicott and Roy W. Stafford, eds., *American Defense Policy* 4th ed. (Baltimore: Johns Hopkins University Press, 1977), pp. 424-441. Another good overview is Herbert F. York, "The Origins of MIRV," in David Carlton and Carlos Schaerf, eds., *The Dynamics of the Arms Race* (New York: Wiley, 1975), pp. 23-35.

8. Progress in U.S. and Soviet laser and particle-beam programs has been closely monitored in a series of articles by Clarence A. Robinson, Jr. in *Aviation Week and Space Technology* since 1978. My own analysis can be found in "Lasers, Charged-Particle Beams and the Strategic Future," *Political Science Quarterly*, Summer 1980, pp. 277-294; and "Over the Strategic Horizon: Directed Energy Transfer Weapons and Arms Control," *Arms Control Today*, November 1979, pp. 1, 8-9.

9. For a survey of the evolution of American nuclear strategy, see my *Nuclear Strategy in a Dynamic World*, chap. 3. The sweep of postwar strategic evolution prior to the Carter administration is thoroughly covered in Jerome H. Kahan, *Security in the Nuclear Age: U.S. Strategic Arms Policy* (Washington: Brookings Institution, 1975). Harland Moulton's *From Superiority to Parity: The United States and the Strategic Arms Race, 1961-1971* (Westport, Conn.: Greenwood Press, 1971), remains the best analysis of the crucial events and forces of the 1960s.

10. A clear statement and justification of LNO is in Lynn Ethridge Davis, *Limited Nuclear Options: Deterrence and the New American Doctrine*, Adelphi Papers, no. 121 (London: International Institute for Strategic Studies, Winter 1975/1976).

11. See "Alternative U.S. Strategies and America's Future," *Foreign Policy Research Institute* Contract AF 49 (638)-1249 (Philadelphia: University of Pennsylvania, 1965).

12. Harold Brown, *Department of Defense Annual Report, Fiscal Year 1981* (Washington: U.S. Govt. Print. Off., 29 January 1980), p. 65.

13. See Desmond Ball, "Research Note: Soviet ICBM Deployments," *Survival*, July/August, p. 167.

14. Brown, *Annual Report, FY 1981*, p. 66.

15. See particularly Bernard Brodie, *Strategy in the Missile Age* (Princeton, N.J.: Princeton University Press, 1959).

16. Michael Mandelbaum, *The Nuclear Question: The United States and Nuclear Weapons, 1946-1976* (London: Cambridge University Press, 1979), pp. 105-196.

17. See particularly Thomas C. Schelling, *Arms and Influence* (New Haven, Conn.: Yale University Press, 1966).

18. Philip Green, *Deadly Logic: The Theory of Nuclear Deterrence*, (Columbus: Ohio State University Press, 1966).

19. See "Deterrence in Dyadic and Multipolar Environments," in Richard Rosecrance, ed., *The Future of the International Strategic System* (San Francisco: Chandler, 1972), pp. 125-140. I have tried to summarize the more conventional objections to MAD in "Current Nuclear Dererrence Thinking: An Overview and Review," *International Studies Quarterly*, September 1979, especially pp. 461-473.

20. John M. Collins, "Principles of Deterrence," *Air University Review*, November/December 1979, pp. 17-26.

21. For a fascinating account of the influence of weaponry on warfare through history, see Bernard and Fawn Brodie, *From Crossbow to H-Bomb: The Evolution of the Weapons and Tactics of Warfare*, revised and enlarged edition (Bloomington: Indiana University Press, 1963).

22. The multiple changes that had to be made in British bombing strategy because of overestimates of bomber effectiveness are well catalogued in Max Hastings, *Bomber Command* (New York: Dial Press, 1979).

23. W.K.H. Panofsky, *Arms Control and SALT II* (Seattle: University of Washington Press, 1979), pp. 24, 6.

24. See Donald M. Snow, "Deterrence Theorizing and the Nuclear Debate: The Methodological Dilemma," *International Studies Notes*, Summer 1979, pp. 1-5.

25. The classic study of weapons effects is Samuel Glasstone, ed., *The Effects of Nuclear Weapons*, revised edition, (Washington: U.S. Govt. Print. Off., 1964).

26. Brodie, p. 308.

27. Harold Brown, *Department of Defense Annual Report, Fiscal Year 1979* (Washington: U.S. Govt. Print. Off., 1978), p. 63.

28. The formula for the lethality (k) of a single warhead is:

$$K = \frac{Y^{2/3}}{(CEP)^2}$$

where Y is the yield of the warhead. Obviously, squaring the denominator of a fraction, as CEP is expressed, dramatizes its effect.

29. Zimmerman, p. 145.

30. Discussed particularly well in Steinbruner and Garwin.

31. Aspin, p. 7.

32. W.F. Biddle, *Weapons Technology and Arms Control* (New York: Praeger, 1972), p. 166.

33. Much of this debate is summarized in Snow, "Lasers, Charged-Particle Beams and the Strategic Future."

34. Freeman J. Dyson, "Defense against Ballistic Missiles," in Eugene Rabinowitch and Ruth Adams, eds., *Debate the Antiballistic Missile* (Chicago: Bulletin of the Atomic Scientists, 1967), p. 15.

35. Biddle, p. 160.

36. *Ibid.*, p. 185.

37. Collins, p. 22.

38. Brown, *Annual Report, FY 1981*, p. 69.

39. Gray, "Nuclear Strategy: The Case for a Theory of Victory," p. 56.

*With the emergence of the nuclear era and a balance of terror, the value that nations have previously associated with alliance participation has lessened. A rise in nationalism has highlighted the close association between national prestige and the possession of nuclear arms. The net effect appears to be a consistently weaker bargaining position with the Soviets.*

# SUPERPOWER ARMS CONTROL AND THE NATO ALLIES: A QUESTION OF INTERESTS

by

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The two elements of this discussion are alliances and arms control. Neither concept is new. Throughout history, nations and other identifiable groups have often felt the need or desire to enter into agreements for collective defense. The lengthy struggle between Athens, Sparta, and their respective allies in ancient Greece, as aptly described by Thucydides, provides one of history's best examples of the costs and benefits of alliance membership. Likewise ancient are the attempts of men to turn their talents and resources from the accumulation of arms to more productive endeavors. Isaiah's words come to us across the years: "And they shall beat their swords into plowshares, and their spears into pruning hooks; nation shall not lift up sword against nation, neither shall they learn war anymore."[1] In 546 B.C., nearly a century of savage wars was successfully ended with a 14-state conference in Honan, China on the cessation of armaments. This tradition reflects similar aspirations and efforts in both of these areas. Why? Because, almost uniquely among the multiplicity of tools and instruments available to nation states, alliances and arms control agreements both provide the potential means of maintaining both security and peace without paying history's usual premium of treasure and blood.

Why then, one might ask, are the events of history so obviously replete with the failures of alliances and arms control, rather than their successes? The answers lie perhaps in the nature of man, both individual and collective, and in his propensity for continued hope. Although attempts to limit armies and armaments, and to forge successful and enduring alliances, have been a continuous thread in the fabric of history's political thought, frequent failure has often created a sense of disillusionment. Such goals, while desirable, become viewed as unrealistic. Fear, suspicion, and long memories of bitter experience

can gradually erode a national search for such evanescent and ideal solutions. The accumulation and use of arms, rather than their limitation or reduction, have been the dominant theme of history. And so it is today.

Since World War II history has seen perhaps its best and most complex example of these two concepts, alliances and arms control, in the continuing superpower confrontation between the United States and the Soviet Union, and between their respective alliances, the North Atlantic Treaty Organization (NATO) and the Warsaw Pact. This essay will focus on the role, the perspectives, and the involvement of the NATO allies in Europe and on this process. What it will discuss, ultimately, are the perceptions, interests, and security needs of these nations.

While it is generally accepted that arms control negotiations between the two superpowers are essentially if not completely bilateral, it may be argued that this is far less true for the United States than for the U.S.S.R. The United States, owing to such diverse factors as historical precedent, its open society, economics and trade, security needs, and its sphere of influence and self-mandated role as leader of free nations, must temper its positions and agreements to consider the needs and desires of its NATO allies, primarily the Federal Republic of Germany, Great Britain, France, and Italy. Such considerations, which often attempt to balance mutually exclusive demands or perceived needs by various nations, can have a net effect of diffusing both the strength and clarity of the U.S. negotiating position. The result, as may be expected in any struggle between monolith and committee, predictably tends to favor the stronger voice of unity. As an example: the U.S. decision to station Pershing II missiles in Europe required long, difficult negotiations accompanied by public dialogue and debate, positions and issues undoubtedly "overheard" to advantage by the ultimate negotiating opponent, the U.S.S.R. For the U.S.S.R., a similar stationing of SS-20 missiles in Pact satellites was probably a matter of fiat and, in any case, none of the pertinent discussions nor the very fact that such a deployment had taken place would necessarily be public information. Later, such disparate negotiating factors might play significantly in the formulation of a superpower arms limitation agreement regarding these weapons systems—to the potential disadvantage of the United States.

"Some people have said that the history of disarmament in the past twenty-five years has been a sorry record of failure in light of the needs; others have said that it was a splendid record of achievement in light of the obstacles. It is probable that both are right."[2] Needs and obstacles. Herein lies the nexus of NATO Europe's anxiety . . . and the frustrating problems faced by the United States.

The roots of present problems in European arms control and security may well lie in the events of World War II and in the policies—or possibly the failure to implement the policies—adopted by the victorious Allies for resuscitating stricken Europe in the postwar period. Those farther sighted might suggest the roots lie much earlier in European history, in the periods of grand coalitions and balance-of-power politics.

When the fighting ended in Europe in 1945 the Soviet and Western Allied armies had blanketed Europe, the former moving from the north and east, the latter from French and Italian beaches. North of the Alps, the two armed masses met approximately along the line of the Elbe River in central Germany. There they have remained, confronting each other across central Europe ever since. The deep penetration by the Soviet Army into central Europe, and the subjugation of the countries of

Eastern Germany, Poland, Hungary, and later Czechoslovakia, thus became and remain a major factor, complicating efforts to attain continental security and arms control in Europe. Additionally, the handling (or mishandling) of defeated Germany by the allies, the question of division versus reunification, and of the need to prevent Germany from becoming a future threat to *both* West and East—all questions arguably at the absolute center of all larger concerns regarding European alliances, arms control, and security—remain high on the list of factors that, actively or implicitly, influence the United States in superpower arms negotiations. As Henry Kissinger said, "We [the United States] seem to be prisoners of circumstances."[3]

And this is but one of a host of uncomfortable factors. Professor Ronald Steel, in discussing the effect of technology on alliances, states that "the revolution in military technology, by undermining the need for military alliances, has also made them seem extremely perilous commitments. Since helping a friend now involves the likelihood of national suicide, nations are driven to protect themselves as best they can."[4] Central to this technological advance are the effects of nuclear weapons ownership among some, but not all, alliance members.

In the prenuclear era, alliances were regarded as one means by which a nation could increase its national power, and thereby strengthen security and deter potential aggressors. Another advantage of alliance participation was that it could commit other nations to act in defense of a besieged member state. The relative costs of war, therefore, became lower and the security advantages sufficiently high that alliance commitments involving the active military defense of an ally would usually be honored. Typical practice was to effect a gradual involvement, applying power in increments until a solution was derived.

With the emergence of the nuclear era and a "balance of terror,"[5] the value that nations associated with alliance participation lessened. Nations felt less secure and less able to control their destinies. The rise in nationalism among all nations throughout the last decade highlighted the close association between national prestige and the possession of nuclear arms. The shades of inequality among allies possessing or not possessing such weapons sharply widened. At the same time, this possession has provided special status. Britain, clearly no longer a superpower, enjoys a considerable advantage in prestige because of her nuclear forces as compared to Italy, who is admired and respected but often ignored when vital political decisions are made.

Advantages of alliance participation seem to have acquired an elusive, even obscure, quality. An impression of greater self-sufficiency exists among the nuclear group based largely on the presumed military utility of nuclear weapons. Among these nations the sense of military inadequacy that once prompted nations to join alliances has become considerably less strong. To a significant extent the perception of the threat having been somewhat counterbalanced by nuclear capability has served to lessen the insecurity and hence the cohesion among allies.

Today in NATO the nagging feeling persists among the European allies that despite the alliance, or perhaps because of it, national security continues to be threatened. Two important questions derive. First, in the event of a military crisis would the United States come to the defense of Europe? Second, assuming that the United States did come to the defense of Europe, could Europe survive the ensuing war? As conventional military balance has tilted obviously to the U.S.S.R., and the nuclear balance has gradually followed a similar trend, European leaders have wondered with increasing frequency

whether there is any real advantage to be gained through a military alliance with the United States. In some cases they have gone still further, taking initial steps toward accommodation with the Soviets, having judged the multilateral approach clearly less promising than the bilateral.

Added to this are political and economic pressures felt throughout NATO, including the United States, to reduce the number of troops committed to NATO. While an increasingly unfavorable military balance and continuing Soviet qualitative improvements argue against this, the United States has in the past artempted to compensate for troop reductions with the introduction of or the increase in numbers of low-yield battlefield nuclear weapons. In commenting on rhis trend one senior NATO military official opined that "you can't provide and adequate defense against an adversary who possesses a big edge in potential manpower with weapons alone."[6] Many share that view. As conventional capabiliries decrease and reliance on nuclear capabilities increases, flexibility of response options declines. Such a trend ultimately musr suggesr that no feasible military alternative exists to rapid escalation into nuclear war if aggression against Wesrern Europe should occur. Thus some European officials believe that the American disposition to defend Europe—and thereby incur a heightened probability of an attack against the Unired States itself—has been seriously compromised. Sir Alec Douglas-Home, British Foreign Secretary, expressed his doubts about U.S. strategic reliability to the House of Lords in *1963*, "It is assumed that the Unired States would always, in all circumstances, cover Great Britain with her strategic deterrent. I profoundly hope this is true. But it is a large assumption and governments cannot take risks with their national security."[7] Such sentiments and questions seemed (and seem) odd when we recall that it was largely the American guarantee of a nuclear defense ro the Europeans that initially drew those nations into the NATO alliance.

This qualified or questioned disposition to defend allies in the nuclear era suggests even deeper problems concerning alliance cohesion under conditions of actual attack. The underlying prenuclear alliance concept of an attack against one being viewed as an artack against all generally meant posrattack cohesion and unified resistance. In the nuclear era, however, an attack against one might be the signal for the immediate and complete abandonment of alliance ties. Precedent is totally lacking. This potential for unpredictable postattack behavior is yet another reason for nations to deem alliances incapable of strengthening their security.

Finally, in the nuclear age when national survival is on rhe line, there may well be extreme pressures that cause a nation to act first and consult later. In some cases reaction time may be so limited that there will simply be insufficient rime to seek consultation. Also consultation usually involves compromise, an unaffordable luxury with national existence at stake.

These, then, have been some of the factors that prevent the desired confluence of opinion and unity between the United States and her European allies. They appear obviously in the anxieries, the behavior, and the politics of the Europeans; less obviously, yet perhaps more pervasively, in the arms control efforts of the United States *vis-à-vis* the U.S.S.R. It has been said that nations do not have permanent allies, only permanent interests—the western European narions offer an excellent example of why this is so: dependent partners of the soon-to-be lesser power in a continuing nations superpower confrontarion, neighbors of a swelling imperialistic idealogue, the odds seem against them. Their times as Great Powers, as holders of colonial empires, or great armies and

navies, even great statesmen, seem past. Little wonder their paranoia.

In the face of such a predicament, their positions seem more understandable. They participate in MBFR because it is politically palatable to do so, yet they are not sincere about troop reductions; indeed there is scarcely any way that such reductions would not be inimical to their interests. They support, some of them, expanded U.S. missilery on their soil, but only if several participate to broaden and share the risk—almost a disclaimer in itself of the collective risk-sharing reason for the alliance. They support SALT as a concept but scrutinize carefully those prospective conditions that undermine their positions, such as a limiration on technology transfer. They are becoming more outspoken concerning matters that affect their security inrerests and they refuse to accept U.S. arms control policies that conflict with those interests. All of this behavior is both logical and understandable in light of their circumstances.

The net effect on the United States, however, will almost certainly be a consistently weaker bargaining position with the Soviers. Lacking alliance agreement and unity, the United States may be forced increasingly to go it alone. As allies seek rheir own eastern accommodation and judge themselves insecure, regardless of what rhe U.S. response to a Soviet attack in Europe might be, the Soviet goal of breaking the Atlantic bridge may become feasible. It might even become fact. Certainly the Europeans will remain dependent to some extent on the United States, but in the face of the atrophy of American arms and decline of U.S. industrial status—not ro mention the immense worldwide loss of prestige suffered by the United Stares for its intransigent isolation and confusion after Vietnam—it becomes a matter of degree. Today it is the rrend that is being watched, and wirh trepidation. Though very recent events show some promise, promise all too often in the past has been proven empty.

All of these interalliance problems occur at a difficult time. It would appear that the Soviets, having failed now for a considerable period to reciprocate unilateral U.S. initiatives toward strategic restraint (B-1, MX, neutron bomb), have decided that traditional arms control objectives (balance, stability, deterrence, reduced tension) are inappropriate for the Soviet Union, both now and for some years ahead. They have appeared also to reject the central arms control notion that technical or political problems created by inadvertent instabilities in both strategic and local military balances should be managed cooperatively, not competitively.

"We are moving into a much less stable, much more dangerous world, in which the objectives of arms control are going to be more important but less easy to reach."[8] It is vitally importanr that the role of the European NATO allies, in supporting both alliance goals and the increasingly difficult position of the United States, be a strong, united, and positive facror. It is unfortunate that it will likely not be so.

**Postscript.** The role of NATO's European allies on superpower arms control, and on tbe United States in particular, is neirher anarchronistic nor arcane. This may best be seen in some selected quotations by Deputy Secretary of Defense Frank C. Carlucci, extracted from a speech given on 21 February 1981 at the annual Wehekunde military policy conference in Munich, West Germany:

- The (Soviets) steady and cumulative expansion . . . has been accompanied by a long-term and major shift in rhe strategic nuclear balance. The twin results of this shift are that the United States no longer enjoys a srrategic edge to compensate for other deficiencies.

On all levels of military capability, the trends are ominous.

- Neither we Americans nor Europeans have been sufficiently engaged in the search for ways to protect our common interests.
- All too often in the past we have talked of consultation and acted on our own.
- Europe is no longer shattered, impoverished, and disunited. Indeed, Western Europe's total GNP exceeds that of the United States. In this situation the United States cannot be expected to improve and strengthen U.S. forces in Europe unless other allies increase their contribution to the combined defense effort. Nor can the United States, unaided, bear the burden of promoting Western interests beyond Europe.
- We intend to demonstrate a realistic approach to arms control, to ensure that arms control will serve our security needs and that our approach to negotiation is guided by a realistic strategy.
- The harsh realities confronting us, however, dictate even greater efforts by all in the future. There is a critical need to strengthen the conventional force structure in Europe. This requires substantial additional resources, rather than more rhetoric and disputes about percentages.
- Western Europe's stake in the security and stability of the Persian Gulf is enormous and well-recognized. What is perhaps less well understood is the great contribution the Western European members of the alliance could make to help protect the security of this region so vital to them.
- We want to be able to say that a new awareness has arisen in the alliance, a new consensus to give first priority to the defense of freedom.

To this Carlucci speech, Hans Apel, Defense Minister of West Germany, replied, "West Germany pledges today that it will shoulder its share of any extra military commitments decided upon by NATO . . . ."

From both sides of the Atlantic . . . form or substance?

And thus, straining toward tomorrow, we strive stubbornly to survive today . . . "time and circumstances permitting."

*Caveat*: As students of modern arms control, we tend to view Soviet weapons policies of all types as singular, autonomous, and monolithic. We assume that only direct Soviet interests are considered, that satellite "allies" have no voice. In contrast, while disturbing, convoluted, and perhaps inefficient, the widening role of the NATO European allies in U.S. positions on arms and arms control is not only understandable. It is also reassuring.

## BIOGRAPHIC SUMMARY

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## NOTES

1. The Bible, Isaiah, 2:4.
2. William Epstein, *Disarmament: Twenty-five Years of Effort* (Toronto: Canadian Institute of International Affairs, 1971), p. 39.
3. Henry A. Kissinger, "The Viet Nam Negotiations," *Foreign Affairs*, January 1969, p. 200.
4. Ronald Steel, *The End of Alliance and the Future of Europe* (New York: Viking Press, 1964), p. 40.
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6. John Newhouse, *U.S. Troops in Europe* (Washington: Brookings Institution, 1971), p. 68.
7. Sir Alec Douglas-Home, Debate in the House of Lords, 11-14 March 1963.
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*Assertion of regional autonomy over control of navigation in the Strait(s) of Malacca appeared at one time to threaten the maritime security of this vital sea route. The resolution to date of the environmental and safety concerns of the coastal states of the Straits illustrates the effective working of international law to resolve the conflicting claims of such coastal states and major outside users.*

# THE MARINE ENVIRONMENT AND MARITIME SECURITY IN SOUTHEAST ASIA: CONTROLLING OIL TANKER TRAFFIC IN THE STRAIT OF MALACCA

by

**Daniel P. Finn**

The Straits of Malacca and Singapore ("Straits of Malacca") which lie between the southern Malay Peninsula, Singapore, and the island of Sumatra, have historically been a major international maritime route between the South China Sea and the Indian Ocean.[1] In the post-World War II period the Straits have become especially important internationally owing to the passage of oil tankers from the Gulf states of the Middle East to the rapidly growing economies of East Asia, especially Japan,[2] and to naval deployments, including those of the United States and the Soviet Union, in the Pacific and Indian Oceans.[3] Following the "oil shock" of 1973-74, which revealed the extent of the dependency of the economies of the industrialized democracies on Middle East oil, the tanker routes from the Gulf through the Strait of Hormuz and around the Horn and Cape of Africa through Southeast Asia—became a focus of international concern over energy security. Both the growing impatience of certain coastal states with the pollution caused by passing tankers and their security concerns with passing warships, as well as the possibility of naval action involving the tanker routes during times of crisis, posed important questions about the security of these routes. In Southeast Asia, the concern of the coastal states of the Straits of Malacca—Indonesia, Malaysia, and Singapore—with tanker and warship traffic in the Straits threatened, in the early 1970s, to affect this important maritime route.

**The Threat of Jurisdictional Conflict Over Vessel Traffic in the Straits.** During the early 1970s many

coastal states formally claimed a 12-naurical mile territorial sea. As a result of these claims, many important straits traditionally used for international navigation ("international straits") would be incorporated within the territorial seas of their coastal states. Although the United States has historically recognized only 3 miles as a valid territorial claim, international disagreement on this point had prevented the first United Narions Conference on the Law of the Sea (UNCLOS) from including a uniform standard on the permissible breadth of the territorial sea in the 1958 Geneva convention on the territorial sea.[4] UNCLOS III, in session since 1973, would recognize the validity of the 12-mile territorial claim as part of a comprehensive diplomatic package that would also protect maritime passage through international straits, prescribe the offshore jurisdiction of coastal states (including their jurisdiction over the continental shelf and a newly created 200-mile exclusive economic zone or EEZ), establish an international regime for deep seabed mining, and help define the rights and obligations of states with respect to pollution of the marine environment.[5] With respect to passage through international straits, UNCLOS III would create a regime of "transit passage"—a set of special rules for international navigation through straits the waters of which would otherwise have become subject to the rules applicable within territorial seas.[6]

In November 1971 the Governments of Indonesia, Malaysia, and Singapore issued a joint declaration that, if implemented, could have significantly affected the legal status of the Straits of Malacca:[7]

- The three Governments agreed the safety of navigation in the Straits of Malacca and Singapore is the responsibility of the coastal states concerned;
- The rhree Governments agreed that a body for cooperation to coordinate efforts for the safety of navigation in the Straits . . . be established as soon as possible and that such body should be composed of only the three coastal States;
- The Governments of Indonesia and Malaysia agreed that the Straits . . . are not international straits, while fully recognizing their use for international shipping in accordance with the principle of innocent passage;
- The Government of Singapore took note of the position of the Governments of the Republic of Indonesia and Malaysia in this point.

In this declaration, the three Governments announced their intention to assume competence over controlling international vessel traffic in the Straits. The Governments of Indonesia and Malaysia would have gone further and declared that passage through those parts of the Straits within their territorial waters was fully subject to the ordinary principle applicable in such waters—"innocent passage"—and not to any special principles applicable in international straits. (Under the 1958 Geneva convention on the territorial sea, foreign vessels passing through a territorial sea are allowed to proceed freely if they are in innocent passage; innocent passage may not be "hampered" by a coastal state, except for temporary suspension for security reasons. In straits used for international navigation, however, through passage may not be suspended. Passage through a territorial sea is presumed innocent unless it is "prejudicial to the peace, good order or security of the coastal State.")[8] If international passage through the Straits had become subject to the rule of innocent passage, the operations of oil tankers and naval vessels could have been affected, inasmuch as at the time of the joint declaration coastal states had begun to question the "innocence" of operations by such vessels and to claim some jurisdiction over them. This was true especially for oil tankers, in the aftermarh of several

serious tanker casualties that polluted coastal waters. This article will examine the background and significance of the joint declaration of its resolution to date through international legal and political means. The history of regulation of oil tanket traffic in the Straits of Malacca provides an excellent example of the significance of marine environmental concerns and the role of international law and organization in safeguarding maritime security.

**The Background of Jurisdictional Conflict Over Navigation in the Straits of Malaeca.** The efforts of the three coastal states to obtain greater control over the Straits, through their joint declaration and other actions, was based on a complex of factors including the pollution and safety risks associated with large tanker traffic, as well as regional security concerns. But these factors affected each of the three states somewhat differently, and the formulation of an integrated regional response to the environmental and security issues was impeded by the divergence of local intetests.

As the size and number of tankers to serve the needs of Japan and other East Asian countries rapidly increased in the period prior to 1973, their navigation through the Straits presented increasingly obvious safety problems.[9] In 1967 *Tokyo Maru*, a 151,288 deadweight ton (dwt) vessel, scraped bottom and released about 1,000 tons (T) of crude oil. A similar incident occurred to *Idemitsu Maru* in 1968, and in 1971 two tankers over 200,000 dwt, *Arabian* and *Eugenie Niarchos*, ran aground. Several more serious or well-known accidents, such as that of *Showa Maru* (1975), happened only later, when coastal state efforts were already focused on controlling oil tanker traffic.

A combination of factors account for the maritime hazards of the Straits.[10] Traffic in the Straits is dense and is composed of vessels of various classes, speeds, and destinations. This causes considerable crossing and overtaking in the main shipping lanes. The shipping lanes themselves become very narrow, especially at critically crowded points and in areas in which surrounding depths constrain the maneuvering of larger vessels. In the past, charts were deficient and aids to navigation insufficient or incompletely maintained; even contemporaty charts cannot account fully for changing bottom conditions resulting from sand waves, however. The Straits are also subject to significant tides and currents, and rain squalls often reduce visibility.

About a fifth of all the oil shipped across national botders in the world is moved by tanker through Southeast Asia. It has been calculated that in order to supply Japanese needs alone, 1,627 tanker trips with a mean capacity of 150,000 dwt would be required, or over 3,200 trips both ways. Assuming this capacity were to move through the Straits of Malacca, approximately five very large crude carriers (VLCCs—tank vessels in excess of 175,000 dwt) would transit the Straits loaded each day and five such vessels would return through the Straits in ballast.[11] But tankers, including the larger tankers, are not even the major component of shipping in the Straits. A traffic survey, based on visual sightings and radio contact, was conducted by the Port of Singapore Authority in 1976; the study reported about 150 vessels passing per day, of which 90 were general cargo vessels and 40 were tankers.[12] Even if it is assumed that this number of vessels were distributed evenly and traveling in equal numbers in both main directions, vessels would pass each other while traveling in opposite directions approximately every 9 minutes.[13] But this simplifying assumption does not, of course, account for crisscrossing, random grouping, overtaking, and other factors.

Bottom conditions also create safety problems, especially for large vessels.[14]

While the Straits themselves narrow to a width of 3.2 nautical miles (n. mi.) off Singapore, the deep channels are considerably narrower, as little as 1,000 meters (m) in parts of the Singapore Strait and only 600m near the One Fathom Bank near the western entrance to the Straits of Malacca. In addition to their narrowness, the deepwater areas are discontinuous and irregular and require large vessels to maneuver to stay in deep water. In several places, vessels have to maneuver through areas of less than 23m average depth in order to traverse shallow spots between deeper channels. These maneuvers would be difficult for large tankers even if crowded traffic conditions did not constrain their movements or occasionally even compel them to take evasive action.

The navigational problems of the Straits have led to numerous vessel casualties, especially involving tankers.[15] Although strandings of tankers declined during the 1970s as a result of improvements to aids to navigation,[16] there was a high rate of collisions involving tankers. In 1974, while only one reported tanker stranding took place in the Straits out of about 100 worldwide, fully 10 out of a world total of 77 collisions occurred there; in 1975 two of 77 strandings occurred in the Straits, but nine out of 51 collisions. Serious or potentially serious casualties occurred throughout the 1970s. *Showa Maru*, a 237,000-dwt vessel, stranded in 1975 and released about 1,000T of oil, and several other vessels in the same class grounded and spilled oil. Several collisions also occurred; for example, *Diego Silang* collided with two other vessels (one a tanker) and spilled 6,000T of oil. There were several total losses: *Oswego Merchant*, carrying jet fuel, burned and sank after a collision with another tanker; *Tosa Maru*, which was in ballast, collided with another tanker and broke up, caught fire, and sank.

Regardless of the undeniable safety problems of commercial traffic in the Straits, the coastal states found it difficult to arrive at a unified position on regulation of navigation.[17] This is evident from the language of their joint declaration, in which the Singapore authorities would not go as far as Indonesia and Malaysia in asserting regional authority over traffic in the Straits. It is thought that Indonesia had several motivations in moving for regional control of maritime activities in the Straits.[18] Indonesia, because of its colonial legacy and history of internal and external threats to its national cohesion, has been especially sensitive to the operations of vessels in waters within and adjacent to the Indonesian archipelago.[19] Indeed, Indonesia has asserted, since 1957, its territorial jurisdiction of the waters within the archipelago;[20] Indonesia's claim, along with similar claims by the Philippines and Fiji, have been important at UNCLOS III as the Conference has moved to define the rights and obligations of such archipelagic states with respect to foreign vessels.[21] (Indonesia was the first to act on the issue of tanker safety in the Straits, declaring in 1972, with Malaysian "agreement in principle," that it would ban passage by vessels over 200,000-dwt capacity.)[22] It is also thought, however, that Indonesia, in moving aggressively on the issue of traffic in the Straits of Malacca, may have sought to divert some traffic from the Straits through Indonesia where such traffic could potentially provide some benefit to its national ports and refineries and perhaps become subject to some form of regulation in the sealanes and the straits within the Indonesian archipelago that had traditionally been used for international navigation.[23] Malaysia, while thought to be somewhat differently motivated, could reach a similar position on the issue of vessel traffic in the Straits of Malacca; local control of traffic in the Straits could help alleviate coastal environmental problems, especially

harmful to its small-scale fisheries, and also help to neutralize the region from the influence of major outside powers.[24] But Singapore, while it could hardly deny the significance of the environmental and safety problems caused by tanker traffic, was concerned lest assertion of coastal state authority by Indonesia and Malaysia affect its access to world trade and the benefits of tanker operations, including drydocking and other port services provided there.[25]

It is in examining these motivations that the relationship between the environmental and safety concerns and security considerations becomes apparent. Indonesia's assertive posture may be attributed to its traditional concerns with domestic autonomy over developments in and around the archipelago; in the postcolonial period rhe Republic of Indonesia had moved aggressively to consolidate its internal situarion and assert its claim to leadership in the politics in rhe region based on its large population and natural resource base.[26] Malaysia had sought in the same period to insulate itself from outside forces and prevent the region from becoming a focus of great power confrontation after the withdrawal of British forces, as well as to shield itself from the early regional aspirations of Indonesia.[27] Malaysia's extraregional concerns have included support by the People's Republic of China for indigenous Communist movements and the possibility of countervailing U.S. and Soviet buildups in the area, which aside from its intrinsic importance in terms of geographical location, population, and natural resources, also provided an essential link between the Pacific and Indian Ocean theaters of military operations.[28] The Singapore Government, on the other hand, tended to welcome outside participation in the region's economy and friendly links with the West.[29] Such connections could help protect it from insurgency and military deployments by Communist forces and shield it against pressures for regional influence exerted by its neighbors. These complex security factors caused concern to the United States and the Soviet Union, which both undertook various diplomatic initiatives and naval activities in response to them. In the month after the joint declaration was issued, both the United Srates and the Soviet Union undertook naval operations in the Straits.[30] And while the United States apparently did not respond in a formal manner to the joint declaration, the Soviet Union the following year received the Malaysian Prime Minister in Moscow, made contacts in Tokyo with the Japanese Government, and sent a diplomatic mission to Jakarta.[31]

Japanese actions were perhaps most influential in motivating the coastal states to declare regional autonomy over navigation through the Straits.[32] In 1968 private interesrs in Japan formed the Malacca Straits Council as a nongovernmental organization affiliated with the Japanese *Keidanren* (Federation of Economic Association). Atop the natural regional reaction to such a title being assumed by Japanese interests, the Japanese press began playing up rhe idea of the Straits as Japan's "lifeline"; concepts of Japanese naval defense of rhe Straits even appeared. A Japanese delegation visited the region in 1970, acting, it was alleged, as if it were an "equal partner" in managing the navigational situation in the Straits; hydrographic surveys have been sponsored by Japanese organizations since 1969, although they have been occasionally impeded by local reaction to such Japanese initiatives. These disturbing activities were capped off in July 1971 with a formal proposal by the Japanese representatives to the Intergovernmental Maritime Consultative Organization (IMCO) that a traffic separation scheme (TSS) be established in the Straits under IMCO auspices.

## Development of a Regulatory Regime for Oil Tankers Transiting

the Straits of Malacca. After issuance of the joint declaration, political difficulties both within and outside the region impeded further cooperative action, although various informal actions were taken by the coastal states, outside powers, and industry.[33] Several radical proposals surfaced—one by Indonesia to ban vessels in excess of 200,000 dwt and another by the head of Malaysia's state oil company to impose user fees on passing vessels.[34] A strict prohibition based on vessel size would have had serious effects on the economics of oil transportation between the Middle and Far East; vessels over 200,000 dwt, of which there were a substantial number, would be forced to proceed through the Straits of Lombok and Makassar in the Indonesia archipelago as an alternative to the Malacca route. The Lombok route would involve over a thousand nautical miles—3 days—extra travel. Thus transport by the larger VLCCs would have tended to become uneconomical at the same time that there was significant capacity in this range, and the imminent downturn in the rate of growth of oil consumption after 1973 soon made continued construction of larger vessels (ultralarge crude carriers, ULCCs—vessels in excess of 350,000 dwt) unlikely. The extension of the tanker route for the largest VLCCs would also have required additional transportation capacity.[35]

The *Showa Maru* accident in January 1975 led to a renewed call for action in the region and in February the Prime Ministers of the coastal states held talks on the tanker issue while at a meeting of the Association of Southeast Asian Nations (ASEAN).[36] The Prime Ministers agreed upon the concept of "underkeel clearance" (UKC) as a basis for regulation for tankers, called for development of a TSS for the Straits, and initiated technical consultations on these and related issues. Technical and other difficulties again slowed the results of consulration in the following years, which were punctuated by the collision of *Diego Silang*. At a second conference of their Prime Ministers in February 1977, again at an ASEAN meeting, the three governments finally agreed to a regulatory regime based on a required UKC of 3.5m throughout passage; establishment of special deep-water routes (DWR) for vessels of 15m draught, in which no overtaking by them would be allowed; adoption of TSS (separated traffic lanes in each main direction) in three critical areas—at the One Fathom Bank, the Singapore Main Strait, and the Phillip Channel (in the eastern part of the Singapore Strait, where the Straits open out into the South China Sea); and operational recommendations, including maximum vessel speed in critical areas (12 knots).

The coastal states' adoption of UKC as the basis for limiting the passage of larger vessels marked a significant turning point in mediating the divergent interests among the coastal states themselves and between the region and outside users.[37] A capacity limitation, such as that earlier advocated by Indonesia, would have rigidly excluded certain vessels regardless of their operating characteristics; furthermore it could have been enforced relatively easily as vessel capacity if fairly well known through shipping registers and the like. UKC is neither as clear in concept nor as straightforward in application. First, there is disagreement over the very meaning of the term UKC, *i.e.*, whether UKC should be calculated so as to make allowance for various errors and safety considerations and for vessel "squat"—the tendency of a large vessel's draught to increase with speed. Second, actual UKC is responsive to vessel design, load, trim, speed, and tidal fluctuations—none of which are easily observable during passage or readily determinable from published sources.

Aside from some technical concerns about the proposed vessel routes (that were submitted to the coastal states for

further development[38]), the regional proposal was well received by IMCO and in November 1977 IMCO's Assembly formally approved the TSSs and other rules for passage in the Straits.[39] The action of the coastal states will have significant positive effects on the safety of navigation through the Straits by establishing well-defined and universal vessel routes, including special DWRs, and recommending operational practices that will help vessel masters ensure a safer voyage. It is unlikely for several reasons, nevertheless, that the vessel lanes and operational rules will completely resolve the safety and environmental concerns associated with large-scale use of the Straits for oil transshipment. First, the Straits are narrow and crowded and larger vessels are constrained in their maneuvering by depth limitations, occasionally poor visibility and the reduction of their speed for overall safety and also, for the largest vessels allowed to operate in the Straits, to reduce their squat. Second, although adoption of navigational rules by IMCO accords them definite international recognition, they remain voluntary in many respects;[40] in the case of the operational rules approved by IMCO to supplement the TSSs and DWRs, in addition, there is considerable nonauthoritative language, *e.g.*, the use of such phrases as "as far as practicable" (avoidance of the DWRs by non-deep draught vessels); "as possible" (maintenance of steady course within the TSSs); and "advised to" (use of the DWRs, maximum 12-knot speed, participation in a voluntary ships' reporting system).

The "accommodation"[41] among regional and external interests that is represented by the IMCO-approved rules for tankers and other vessels in the Straits at once illustrates the difficulty of arriving at significant substantive regulation on an international level and the role of international law in resolving such differences. The IMCO rules address only one aspect of the safety and environmental problems associated with transit oil tanker traffic in the Straits—vessel routes and operating practices. They do not provide in any way for operational restrictions (such as no-discharge zones) or safety standards in excess of universal standards, that could be desirable in such a constrained and heavily used waterway. They do not establish any special provisions on vessel liability or requirements for contingency capability or the establishment of funds to defray or compensate the costs to the coastal states of having such heavy traffic in their waters.[42] To a certain extent, these issues can be resolved through informal and voluntary arrangements between the coastal states and outside users—both other governments and private interests. The Japanese, for example, largely operating within the framework of private associations, the Malacca Straits Council in particular, have made significant contributions to hydrographic surveying and construction of aids to navigation.[43] The accommodation also, as has been noted, makes enforcement difficult and it does not necessarily provide a sound basis for further regulation. Specifically, reporting of vessel passage—including information on characteristics, speed, and time of passage prior to entry into the Straits—remains voluntary. Further regulation of vessel traffic, such as establishment of a vessel traffic system (VTS) with comprehensive command and control capacity, would require such information as well as an extensive shoreside communication and administrative capability. Aside from questions about the practicality of VTS in such heavily and diversely trafficked and strategic waters, the necessary reporting of the movements and characteristics of vessels would also inform the coastal states of the full extent of maritime operations and possibly inflame local feelings, especially if further accidents or military tensions occur.

Regardless of these substantive short-

comings, the process by which the IMCO rules were adopted illustrates the successful working of international law in such a situation. After announcing that they would proceed on a regional basis, and even threatening to seek a change in the international juridical status of the Straits, the coastal states proceeded to develop a broadly acceptable regulatory regime on a regional basis and to refer it to IMCO for international approval prior to its implementation. IMCO's adoption of the regime accords it significant international recognition and, for navigational practices affecting the TSSs, international enforceability through general international agreements on navigation.[44] Such a procedure, by which states may forward proposed systems of traffic regulation to IMCO for approval, will probably be adopted formally if UNCLOS III concludes successfully and a new treaty on the law of the sea is adopted. Under the Draft Convention as the Law of the Sea ("Draft LOS Convention") under consideration at UNCLOS III:[45]

> States bordering straits may designate sea lanes and prescribe traffic separation schemes for navigation in straits where necessary to promote the safe passage of ships.
>
> Before designating . . . sea lanes or prescribing . . . traffic separation schemes, States bordering straits shall refer proposals to the competent international organization with a view to their adoption. The organization may adopt only such sea lanes and traffic separation schemes as may be agreed with the States bordering the straits, after which the States may designate . . . them.

It would appear that the coordinated actions of the Government of Indonesia, Malaysia and Singapore taken after their joint declaration of 1971, have not only followed international law as it existed prior to UNCLOS III, but have by their example exercised considerable influence on the progressive development of international law in this field, specifically the above article of the Draft LOS Convention under consideration by UNCLOS III.[46] The procedure codified by UNCLOS III, for traffic regulation as well as other matters affecting international straits and other critical or sensitive water bodies, may help to regularize the process by which these and other coastal states may seek international recognition of the special needs of such waters.[47] But referral to international organizations of such questions, or their reference to separate agreements among the parties concerned, may not always provide a substantively satisfactory answer and also may lead to procedural frustration when international support for such measures is not forthcoming, for commercial or strategic reasons.[48] Nevertheless, the establishment of a procedural framework through which such disagreements can be resolved could help to make these conflicts more manageable.

The recent development of navigational rules for the Straits of Malacca illustrates the resolution of conflicting

## BIOGRAPHIC SUMMARY

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interests about the use of international straits through international consultations. The procedures followed by the coastal satates in this case could be applied elsewhere and would be codified in the Draft LOS Convention under consideration at UNCLOS III. Such international procedures, whether conducted on the basis of traditional law of the sea or specifically authorized in a general LOS convention, will not, however, likely prove fully satisfactory to coastal states in achieving effective substantive regulation. Extensive local regulation of maritime activities in international straits would necessarily interfere with important interests of outside users in commercial transportation and naval operations. The Malacca Straits case also illustrates, however, the importance of local environmental and security concerns to coastal states and their porential effect on outside users. Continued progress should be made on such regional issues to prevent further conflict between coastal states and major users and to achieve maximum maritime security in such areas.

## NOTES

1. M. Leifer, *Malacca, Singapore, and Indonesia* (The Netherlands: Sijthoff and Noordhoff, 1978), pp. 6-31.
2. Daniel P. Finn, et al., *Oil Pollution from Tankers in the Straits of Malacca: A Policy and Legal Analysis* (Honolulu, Hi.: East West Center, 1979), pp. 5-11.
3. Leifer, pp. 105-127.
4. Convention on the Territorial Sea and the Contiguous Zone, done 29 April 1958, entered into force 10 September 1964, 15 U.S.T. 1606, TIAS 5639.
5. The results of UNCLOS III to date may be found in its Draft Convention on the Law of the Sea (Informal Text) (hereinafter "Draft LOS Convention"), U.N. Doc. A/CONF.62/WP.10/Rev. 3, 27 August 1980.
6. *Ibid.*, Arts. 34-45. Elliot L. Richardson, "Power, Mobility and the Law of the Sea," *Foreign Affairs*, Spring 1980, p. 902 (emphasizing significance of the results of UNCLOS III for naval and other maritime activities).
7. The full text of the joint declaration is reprinted in Leifer, p. 204; the operative paragraphs are also quoted in Finn, et al., pp. 76-77.
8. Convention on the Territorial Sea and the Contiguous Zone, Arts. 14-17.
9. The evolution of tanker size and resulting operational characteristics relevant to Southeast Asian waters are discussed at length in Finn, et al., pp. 124-128. A detailed summary of tanker casualties and loss trends in the region is given in Finn, et al., pp. 11-18.
10. Geographical data on the marine environment in the Straits area, and detailed information on bottom conditions, is given in Finn, et al., pp. 20-30.
11. *Ibid.*, p. 5.
12. *Ibid.*, pp. 5, 6.
13. *Ibid.*, p. 11.
14. The hydrographic characteristics of the Straits are discussed in *ibid.*, pp. 20-30.
15. Casualty data and trends are presented in *ibid.*, pp. 11-18.
16. *Ibid.*, pp. 77, 84.
17. Leifer, pp. 25-50; Finn, et al., pp. 76-99.
18. Leifer, pp. 105-107; Finn, et al., p. 77.
19. Leifer, pp. 14-27.
20. Indonesia's 1957 Cabinet declaration, and Act No. 4 of 1960, to this effect, are reprinted in Leifer, pp. 201-203.
21. Leifer, pp. 100-105; Draft LOS Convention, Arts. 46-54 (regime of archipelagoes).
22. Finn, et al., p. 78; Leifer, p. 66.
23. Leifer, pp. 105-107; Finn, et al., p. 77.
24. Leifer, pp. 27-31; Finn, et al., p. 77.
25. Leifer, pp. 119-120; Finn, et al., p. 77.
26. Leifer, pp. 14-27.
27. *Ibid.*, pp. 10-31.
28. *Ibid.*
29. *Ibid.*, pp. 106-107; Finn, et al., p. 77.

30. Leifer, p. 114.

31. *Ibid.*, pp. 107-121.

32. For narratives of the relationship between Japanese actions and the development of a regional response to navigational problems, see generally Finn, et al., pp. 78-80; Leifer, pp. 42-45.

33. For discussions of the period between 1971 and 1975, see Finn, et al., pp. 77-78; Leifer, pp. 113-121.

34. The imposition of user fees based on passage through a territorial sea is prohibited by Art. 18 of the Geneva Convention on the Territorial Sea and the Contiguous Zone, which reads:

1. No charge may be levied upon foreign ships by reason only of their passage through the territorial sea.

2. Charges may be levied upon a foreign ship passing through the territorial sea as payment only for specific services rendered to the ship. These charges shall be levied without discrimination.

35. The comparative economies of the Malacca and Lombok routes are extensively analyzed in Finn, et al., pp. 124-129.

36. Post-*Showa* developments are described in *ibid.*, pp. 78-79; Leifer, pp. 66-76, 132-148.

37. Finn, et al., pp. 81-83.

38. Leifer, p. 75. The regional proposal to the Maritime Safety Committee of IMCO had also contained a clause, "All tankers and large vessels navigating through the Straits shall be adequately covered by insurance and compensation schemes." This was bracketed by the Committee, and deleted by the Assembly, on grounds of lack of jurisdiction. Finn, et al., p. 86.

39. The Assembly's resolution of 14 November 1977 is reprinted in Leifer, pp. 206-208; the operative terms of the resolution are included in Intergovernmental Maritime Consultative Organization, *Ship's Routing*, 4th ed. (London: 1978), pp. B-V/1-5.

40. IMCO-approved TSSs are per se voluntary; certain aspects of IMCO-adopted regulations may become mandatory by virtue of other authority, however, specifically the International Regulations for Preventing Collisions at Sea, 1972 (COLREGS 72), *entered into force* 15 July 1977, reprinted in U.S. Coast Guard, *Navigation Rules* (Washington: 1 May 1977), No. CG-169. Rule 10 of COLREGS 72 requires vessels in the vicinity of a TSS to conform their operations to the traffic lanes; it does not speak directly to compliance with such supplemental rules as have been adopted for the Strait of Malacca.

41. Leifer, pp. 147-148.

42. The *Showa Maru* accident, for example, led to claims of $3.6 million by Singapore, of which $1.5 million in cleanup costs were paid, leaving about $2 million in private claims outstanding. Indonesia claimed $24.7 million and received $1.2 million; Malaysia claimed $9 million and received $0.5 million. Finn, et al., p. 114.

43. Finn, et al., pp. 77, 84.

44. See note 40.

45. Draft LOS Convention, Art. 41; Art. 42(1)(a) (general right of coastal states to regulate safety of navigation and marine traffic in international straits, subject to Art. 41).

46. Compare Leifer, pp. 127-148 (effect of views of the three coastal states on the regime of straits used for international navigation under consideration at UNCLOS III).

47. The ability of coastal states to seek international recognition of the special needs of such marine areas is not limited to the regulation of maritime traffic but would also include other antipollution measures, under Art. 211(6) of the Draft LOS Convention. But in many respects such a provision would only codify practices which are already available under other international conventions, for example, the International Convention on the Pollution of the Sea by Oil and Other Substances (MARPOL). Art. III of the 1962 amendments to MARPOL, done 11 April 1962, entered into force 28 June 1967, 17 U.S.T. 1522, TIAS 6109, 600 U.N.T.S. 322, provides for the designation of "no-discharge" zones in addition to those otherwise provided for in the Convention (waters within 50 n. mi., of shore generally and the vicinity of the Great Barrier Reef), by amendment to Annex A of the Convention. Art. 211(6) of the Draft LOS Convention, which would generalize such procedures, reads:

> Where international rules and standards . . . are inadequate to meet special circumstances and where coastal States have grounds for believing that a particular, clearly defined area of their respective exclusive economic zones is an area where, for recognized technical reasons in relation to its oceanographical and ecological conditions, as well as its utilization or the protection of its resources, and the particular character of its traffic, the adoption of special mandatory measures for the prevention of pollution from vessels is required, coastal States, after appropriate consultations through the competent international organization with any other States concerned, may for that area, direct a communication to the competent international organization, submitting scientific and technical evidence in support . . . . If the organization [agrees], the coastal State may, for that area, adopt laws and regulations for the prevention, reduction and control of pollution from vessels, implementing such international rules and standards or navigational practices as are made applicable through the competent international organization for special areas. Such additional laws and regulations may relate to discharges or navigational practices but shall not require foreign

vessels to observe design, construction, manning or equipment standards other than generally accepted international rules and standards . . . .

48. The Draft LOS Convention would simply refer the provision pf navigational aids and other general safety and environmental issues connected with the use of straits for international navigation to cooperative agreements among coastal and user states. To date, this is how hydrographic surveys, navigational aids, and compensation of pollution costs have been handled in the case of the Malacca Strait and other areas. Finn, et al., pp. 114, 77, 84. Art. 43 of the Draft Convention provides:

User States and States bordering a strait should by agreement cooperate:

(a) In the establishment and maintenance in a strait of necessary navigation and safety aids or other improvements in aid of international navigation; and

(b) For the prevention, reduction and control of pollution from ships.

*Logistics considerations always influence strategy and fuel may be the chief of those considerations. Fuel requirements must always be satisfied. A critical quarter-century of American experience is discussed here.*

# FUEL AND THE BATTLE FLEET: COAL, OIL, AND AMERICAN NAVAL STRATEGY, 1898-1925

by

**John H. Maurer**

To the generation of Mahan and Tirpitz the battle fleet represented the "Queen" on the diplomatic and strategic chessboard of imperial rivalries. The battle fleet, formed around the capital ship, was the decisive weapon in the battle at sea. Battleships acted as "yesterday's deterrent" in the competition between the Great Powers.[1] Because of their importance in the balance of power, a decision concerning the movement of battleships from one station to another inevitably aroused a serious debate on strategy and foreign policy. In the decade before 1914, this type of far-reaching debate on the proper disposition of the fleet engaged the attention of policymakers in both the United States and Great Britain. In the United States this debate centered on whether the fleet should be concentrated in the Atlantic or the Pacific before the completion of the Panama Canal, and in Britain it was caused by the underlying tension between worldwide imperial commitments and the Admiralty's policy of massing battleships in home waters to meet the German threat. Yet the disposition of the battle fleet often depended on logistics considerations as much as strategic dogma or a government's foreign policy. This essay is an examination of the relationship between the logistics problem of securing access to fuel supplies and American naval strategy during the first quarter of this century.

Probably the single most important logistics requirement of a navy at the turn of the century was a supply of coal. Capt. Asa Walker, who served on the General Board of the U.S. Navy, clearly states this fundamental importance of coal:

> The modern man of war presents no canvas to the winds; within her bowels is an insatiable monster whose demand is ever for *coal* and still more *coal*. Every cubic inch of available space is filled with fuel, and when this is consumed the vast machine becomes an inert mass.

> Coal then may be considered as the lifeblood of the man of war, and upon its supply depends her existence as a living factor in the battle equation.[2]

In addition to coal, a modern navy required, of course, other logistics support: supplies of food and water, ammunition, repair facilities equipped with machine tools capable of refurbishing a ship's machinery and weapons, and drydocks capable of handling the largest warships; all were needed to ensure the operational readiness of the fleet. While it is impossible to ignore these elements, providing the fleet with its "lifeblood" of coal was the biggest logistics headache facing naval planners in this period.

The strategic axioms guiding naval policymakers of that age—concentration of the fleet and the closely related short war dogma—accentuated the Navy's appetite for coal. Although its fuel requirements could vary depending on its size and activity, a battle fleet consumed large quantities of coal even in port. One logistics study in 1912 estimated that the mobilization and concentration of the battle fleet in the Caribbean would require almost 300,000 tons of coal and the fleet would continue to need at least 150,000 tons of coal a month thereafter to conduct operations. Because fuel "is the largest single item to be supplied as to both weight and volume," this operation would have required all the colliers in the U.S. merchant marine in addition ro those possessed by the Navy.[3] Of course, the mobilization, concentration, and operations of the battle fleet in the vast distances of the Pacific would need much greater logistics support. As the 1912 Summer Conference of the Naval War College reported, modern naval operations demanded "coal, coal, and more coal."[4]

An appreciation of the logistics constraints on a fleet's operations in this era can be readily gained by examining the process of coaling a ship. Coaling was the bane of every crew's existence: it was dirty, back-breaking work. One commentator went so far as to say: "Coaling causes more desertions from the Navy than any other feature of the service." To take on coal, a battleship would return to a base where a stockpile had been established, or tie up alongside a collier in a calm sea sheltered by land. Coaling at sea was dangerous as collisions frequently occurred when the warship came alongside. Once alongside, relays of men entered the collier's hold, working a maximum of half-hour shifts, shoveling coal into bags. When it was filled, a bag would be hoisted by crane from the collier to the battleship. The coal would then be dumped down the battleship's coal chutes into its bunkers where it was leveled and packed into place. To keep up morale, the ship's band would play popular music while the men shoveled. Once started, this process would be continued nonstop until the bunkers were full. To get the ship ready for action in the shortest period of time, officers tried to hasten this onerous chore by timing the crew and attempting to set record speeds for coaling. A good crew could transfer over 100 tons of coal an hour but coaling a fleet could last several days. In 1899 and 1900 the Navy conducted experiments aboard the collier *Marcellus* and the battleship *Maine* to develop means to speed this process and permit coaling at sea. As a result of these tests the Navy began building in 1904 specially designed colliers capable of trolleying 800-pound bags of coal on cables rigged between the ships. Until these ships were ready, Admiral Dewey told the Secretary of the Navy, there were no colliers "suitable for accompanying the fleet and keeping it supplied with coal."[5] Even with their arrival, however, coaling remained a painfully slow process and proved impractical for ships while underway at sea; the operations of a fleet consequently remained

circumscribed by the location of coaling stations.[6]

This constraint worked to the advantage of Great Britain. During the 19th century Britain produced and exported more coal than any other country. Coal was one of Britain's two major export commodities; it was calculated that nine-tenths of the tonnage of British exports consisted of coal. This coal helped to pay for the vast quantities of imported raw materials and food that Britain consumed.[7] As an outcome of this export business, British firms acquired a virtual monopoly on the world's coal trade and established coaling stations stretching around the globe. One reason for this commanding position was the unsurpassed quality of coal from Newcastle, South Wales, the Clyde, and the Mersey. Welsh coal out of Cardiff, considered the best marine coal in the world, was sought after by all navies. Nor were British governments above using this dominance of the seaborne coal trade as a weapon in its foreign policy.[8] Without access to her coaling stations, Britain's rivals found that problems of fuel supply could drastically limit the range of their naval operations, especially in distant waters.[9] In a perceptive (and comical) remark to Chancellor Bülow, Kaiser Wilhelm best described the dilemma facing the other Great Powers when trying to supply overseas naval deployments without British cooperation: "Aber wie der Chinese sagt, in pigeon English: 'If nor have gor coal, how can do?'"[10]

The dependence on British bases and good will is well illustrated by the logistics problems of supporting Dewey's campaign in the Philippines during the Spanish-American War. In a now legendary telegram of 25 February 1898, Assistant Secretary of the Navy Theodore Roosevelt ordered Dewey to concentrate his scattered Asiatic Station at the British colony of Hong Kong to await the anticipated outbreak of war with Spain. The telegram warned Dewey to pay particular attention to his fuel supplies: "Keep full of coal." Dewey's squadron was desperately short of all supplies: provisions, ammunition, and fuel. When he arrived at Hong Kong, Dewey received the rude shock of finding that he could not buy enough coal to meet his needs for a protracted campaign. The naval commanders of other countries also at Hong Kong had brought up all the existing supplies of Welsh coal to prepare their squadrons in case that war erupted from the Great Power rivalry in China. Dewey also learned that Japan, the other important source of supply in the Far East, intended to enforce strictly its neutrality in the event of war, thereby denying the American squadron coaling facilities. Dewey eventually found the coal needed, but only at the price of buying the collier *Nanshan* then en route from England. To carry provisions for his squadron, Dewey also purchased the steamer *Zafiro*. On 22 April, only a day before being ordered to quit Hong Kong by its Governor, Dewey's logistics preparations were completed when the cruiser *Baltimore* arrived with a badly needed supply of ammunition. While the destruction of the Spanish squadron in Manila Bay on 1 May relieved Dewey of that naval threat, it did not end his logistics difficulties. That supply problems were never far from Dewey's mind can be seen in his handling of the battle, when he ordered the squadron to retire because of a report (subsequently proven to be untrue) showing his ammunition supplies practically exhausted. At Manila Dewey had no means to communicate news of his victory because the Spanish Governor refused to let him use the Manila-Hong Kong telegraph cable. Dewey retaliated by dredging up the underwater line and severing Manila's link with the outside world. Only by sending the revenue cutter *McCulloch* to Hong Kong with two brief telegrams, requesting ammunition and troops to occupy Manila, could Dewey announce

the victory over the Spanish squadron. Fortunately for Dewey, the British authorities in Hong Kong did not interfere with these communications.[11] There can be little doubt that without British cooperation, Dewey could not have mounted his successful campaign against the Spanish squadron in the Philippines.[12]

With the collapse of Spain's empire in 1898, the United States was burdened with the formidable strategic task of defending its newly acquired overseas territories. In the Far East, where the continuing unrest in China seemed to presage a Great Power confrontation, American military planners faced an especially difficult problem because of the great distances from the centers of production and command on the eastern seaboard of the United States. The isolation of any American forces in this region had been clearly demonstrated during the final stages of the war with Spain. At that time, it looked as if the Spanish Government would dispatch a squadron more powerful than Dewey's force to recapture the Philippines. This force, commanded by Admiral Camara, would be sent from Cadiz to the Philippines via the Suez Canal. To the members of the Naval War Board set up to guide American strategy during the war, there appeared to be little that could be done to reinforce and resupply Dewey to prevent defeat by Camara's squadron. Fortunately for the United States, the Spanish Government decided on peace before Camara's force passed through the Suez Canal.[13] The intervention in China, 2 years after the close of the war with Spain, confirmed the immense logistics difficulties in supporting American forces in the Far East. "To show the difficulty that is experienced in getting coal to our ships at Taku," Secretary of the Navy John D. Long wrote, "it is sufficient to state that it is shipped by our own colliers from Hampton Roads and from Cardiff, involving voyages of 12,000 to 14,000 miles."[14] Without adequate bases, the United States could not expect to repeat the triumph of Manila Bay against a better prepared foe.

America's "New Empire" would need to copy the British model and develop a system of bases and cable lines, with an isthmian canal as "lifeline," to support the movements of the fleet. Moreover, strategic concerns, and not congressional politics, should dictate the location of these naval bases.[15] In a report to the Secretary of the Navy, Alfred Thayer Mahan tried to show this relationship between strategy, bases, and fuel supplies:

> Fuel stands first in importance of the resources necessary to a Fleet. Without ammunition, a ship may run away, hoping to fight another day, but without fuel she can neither run, nor reach her station, nor remain on it, if remote, nor fight.
>
> The distribution and storage of fuel is, therefore, eminenrly a strategic question . . . the positions for storing, and . . . the quantity to be stored at each position, are amenable to strategic considerations.

Three principal requirements should govern the choice of location for a base: ready access for the fleet and proximity to the theater of operations, security from an enemy seizure or attack, and ease of transporting coal to the place of storage. Mahan called these three elements: "Position, Strength, and Resources." Thus,

> a place suited for a strategic centre of operations for a fleet should equally be a position for a coaling station; because (1) there it will be near the fleet; (2) it will be under the shelter of rhe fortifications established for the position as a naval base; and (3) at the base should be accumulated all the resources of every kind, fuel included.[16]

As can be seen from this report, considerations of fuel supplies should predominate in the location of the Navy's bases.

During the first two decades of this century the General Boatd devised guidelines on the Navy's base requirements that agreed with the tenets on logistics and strategy contained in Mahan's report.[17] At times, howevet, one base project might be the focus of attention rather than any comprehensive plan. An example of this occurred during the turmoil in China at the turn of the century when the Navy tried to win apptoval for the establishment of a coaling station in the Chusan Islands to counterbalance German, Russian, and British bases at Kiaochow, Port Arthur, and Weihaiwei. Despite such anomalies, there did exist an underlying pattern of base development guiding the Board's proposals.[18] Central to this pattern was the development of bases in the Caribbean to turn it into the "American Mediterranean" (to borrow RADM Henry Taylor's phrase). Guantanamo would be the most important base in this scheme, with a more advanced fleet anchorage at Culebra. These positions, unlike the major facilities along the east coast of the United States, stood directly in the path of any European power that might want to upset the Monroe Doctrine by seizing territory in the Western Hemisphere or attack the proposed isthmian canal. Not surprisingly, the Board also wanted the fortification and construction of coal storage facilities along rhe canal to protect and expedite the movement of the fleet from one ocean to the other. In the Pacific, the Board wanted as a minimum major fleet facilities in the San Francisco area and at Puget Sound. The Board also wanted a fortified advanced base in the Pacific: Pearl Harbor, Guam, and Subic Bay all were considered at one time or another. As can be readily grasped, the Board wanted bases to carry out two strategic tasks: defense of the Western Hemisphere and support for a transpacific advance of the battle fleet to the waters around Japan.[19]

The arguments and recommendations put forward by the General Board, the Naval War College, and navalists like Mahan on the need for a comprehensive base policy derived from strategic considerations, received little support from the Government. The more rousing index of national power, construction of battleships, evoked more widespread interest than the development of coaling facilities. In 1916 RADM Ausrin Knight, President of the Naval War College, testified before Congress that for the price of only one battleship ($15 million) all of America's possessions in the Pacific could be safeguarded by the construction of a major base at Guam. Yet in that same year, when Congress approved appropriations to build a "Navy Second to None," it continued to pass over proposals on base construction.[20] Moreover, it would not be unfair to argue that the development of Pearl Harbor as America's premier advanced base in the Pacific owed more to congressional politics than strategic considerations.[21] Administrative quarrels within the Navy between the General Board and the Bureau of Equipment on the location and number of bases certainly did not help the chances for an improvement in the logistic support of the fleet. The policy of the General Board remained consistent in wanting to concentrate on developing a few key positions required to carry out war plans. This view ofren clashed with the recommendarions of the Chief of the Bureau of Equipment, who was nominally in charge of all matters relating to the Navy's coaling stations and coaling supplies.[22] The more famous fight, berween the General Board and the Army over the location of the Philippine base, is another instance of how the Navy's vision of creating a string of bases could remain incomplete because of interservice rivalry.[23] The General Board nonetheless continued to

press for a comprehensive program of bases tailored to perceived strategic needs, despite the dismal prospects of it ever being adopted, because such a "policy should be prepared and available for those concerned, as the ideal to be sought."[24]

After the San Francisco School Board ordered the segregation of the city's Asia school children from its other students on 11 October 1906, the problem of developing bases in the Pacific acquired an immediacy because of the threat of war with Japan. The defeat of Russia only a year before showed Japan to possess the naval and military prowess to seize American possessions in the Pacific. Some even thought, like the novelist Homer Lea in *The Valor of Ignorance*, that the Japanese had the capability to invade and conquer the United States west of the Rockies. In this paper it is not necessary to show the genesis, evolution, and context of the various Orange Plans as this has been the subject of many fine studies;[25] however, the logistics arrangements for the advance of the battle fleet to the Far East were staggering, and deserve special consideration.

In the late autumn of 1906, the General Board drew up an operational plan, based on the previous summer's conference at the Naval War College, to serve as a guide for the movement of a battle fleet from the Atlantic coast to the Far East. Once again, American dependence on British coal supplies is apparent by the route the fleet would follow to get to the Pacific. Starting from Hampton Roads, the fleet would steam across the Atlantic to the Zafarin Islands off the coast of Morocco, where 5 days would be spent coaling. The next leg of the fleet's voyage would be through the Mediterranean Sea and Suez Canal to Aden and another 5 days of coaling. The fleet would then cross the Indian Ocean, coaling en route in the Seychelles Islands and once again in the Straits of Sunda, before setting out for Philippine waters. Once in the Philippines the first task of the fleet would be the seizure of a base, as it was expected that the Japanese would overrun the American facilities at Manila Bay during the opening stages of any conflict. Because the Navy did not possess enough colliers to support this fleet movement, agents were to be sent abroad to purchase 197,000 tons of coal to be positioned in the Zafarin Islands, Aden, the Seychelles Islands, and Lampung Bay. This route, which is the approach a European navy would use to get to the Far East, shows the undeveloped state of American support facilities in the Pacific.[26] It also raises the important question of how much would a British government hinder the movements of the American battle fleet in a war against Japan after the conclusion of the Anglo-Japanese Alliance of 1902.

Subsequent war plans against "Orange," though adopting a transpacific advance of the battle fleet to the Philippines in place of the path around the belly of the Eurasian land mass, continued to be plagued by grossly inadequate logistics support. In the Administrative Secrion of the Orange War Plan of 1911, the General Board set out the importance of logistics preparations to a successful outcome of a campaign against Japan. "The logical development of the strategy of war with Orange demonstrates how absolutely all operations depend upon the logistics of war." The development of a plan of war against Japan would not have much meaning if it were not accompanied by improvements in the logistic support needed to maintain the fleet in the Pacific.

> If the logistic means are lacking to insure the arrival of the full naval strength of a country in the area where the decisive battles of the war must be fought, and to keep it adequately supplied in that area, it is as overpowering a national calamity as a decided inferiority in

the equality of the personnel and in the number and character of the fighting ships.[27]

Just as the fleet in this era was considered "unbalanced" in the number of battleships to smallet fighting vessels, the Navy in the Pacific was logistically unbalanced because it lacked support facilities and auxiliaries to carry out its operarional plans.

To support its Pacific advance, the General Board wanted to establish coal piles wirh 200,000 tons capacity at five points: Puget Sound, San Francisco, Pearl Harbor, Panama, and Corregidor. This coal would have to be shipped from England or the east coast of the United States because the coal of the western states was not considered of high enough quality for efficient steaming. Because it did not possess enough colliers to meet even its peacetime requirements, the Navy was forced to depend on foreign companies to move coal to its Pacific bases inasmuch as American firms had failed to bid for the Government's business. The cost of transporring coal in 1910 was $4.50 per ton to Honolulu and $2.75 per ton to Manila. This General Board plan never came to fruition: in 1910 the Navy had no coal at Pearl Harbor, Panama, or Corregidor, and only 20,000 tons at San Francisco and 74,000 tons at Puget Sound. The gravity of the fuel situation was brought home once again in 1913 when the California state legislature passed the Webb bill limiting the amount of land that aliens could own. The Bureau of Supplies and Accounts reported that the United States had barely a quarter of the 175 colliers required to support the battle fleet on a voyage to the Far East. Assistant Secretary of the Navy Franklin D. Roosevelt ordered coal shipments bound for the Philippines be diverted to San Francisco and all Navy colliers on the west coast be made ready for service. The Navy also acquired operations on British colliers to accompany the fleet. Despite these efforts, the Navy lacked the resources to keep the battle fleet supplied with the 200,000 to 250,000 tons of coal it would need every month to carry out its operations.[28]

Yet many American officers, like Capt. Sydney Staunton and Cdr. Clarence Williams of the General Board and the influential Gen. Leonard Wood, had come to view Japan as the most likely, and dangerous, antagonist the United States would have to face in a future war. They believed that the best way to deter Japanese military expansion was to move the battle fleet, or at least a sizable portion of it, to the Pacific. While acknowledging the logistics difficulties of such a move, they argued that only by shifting the battle fleet to the Pacific would an acceleration occur in base development.[29] These strategic recommendations were not only "heresies" to the majority of the General Board swayed by the Germanophobic Dewey, but were logistically infeasible because of the high cost of supporting coal-burning battleships in the Pacific. One estimate placed the cost of marine coal in the Pacific as five to eight dollars more expensive per ton than in the Atlantic. Overall, the maintenance of a battle fleet in the Pacific would raise Navy estimates by at least $4 million.[30] The dollar sign, as much as contending strategic assessments, determined the location of the battle fleet.

In the Atlantic the logistics requirements of coal-burning battle fleets can be seen underlying the evolution of American plans for war with Germany. The technological constraints of refueling in this era provided limits on the capability of the German battle fleet. American naval planners correctly reasoned that a German battle fleet, attempting to strike at the east coast of the United States from German home ports, would need to stop to coal in the Azores before crossing the Atlantic. Once this transatlantic voyage had been completed, the German Fleet would

need to find a location, sheltered by land, where it could coal once again. Depending on the season, whether it was winter or summer, the German battle fleet would coal either in the Caribbean or along the New England coast before seeking out the American Fleet for combat. Naval War College studies estimated the German battle fleet would require 97 colliers and "would tax to the utmost Black's (Germany) ability to transport coal at sea."[31] American naval planners believed that their best chance for defeating such a scheme would occur after the German battle fleet had completed the leg of its journey from the Azores, but before it had a chance to coal in the Western Hemisphere. This required that a scouting force discover the German approach from the Azores, and that the fleet's battleships be concentrated to intercept and bring to battle the German Fleet.

One operational study of how this battle should develop bears a remarkable resemblance to Japanese plans of the interwar period to destroy the U.S. battle fleet as it advanced across the Pacific and before it could establish a secure base in the Far East.[32] In case the German Fleet managed to elude detection, American naval planners developed a wide range of plans to occupy, in conjunction with the Army, prospective locations in the Caribbean where the German Fleet could establish a coaling depot.[33]

The need to deny Germany a coaling station in the Western Hemisphere thus played an important part in the diplomacy of the United States in the period before the First World War. In a lecture at the Naval War College, Assistant Secretary of State Francis B. Loomis warned naval officers that a "certain government" meant to gain a "foot-hold in South America . . . . This is a contingency which offers one of the most intricate and delicate problems that can be suggested by our future relations in Latin America. The ultimate fate, declaration, scope and interpretation of the Monroe Doctrine is indissolubly connected with it."[34] President Roosevelt was constantly on guard to prevent Germany from acquiring a naval station in the Western Hemisphere. In a letter to Senator Henry Cabot Lodge, Roosevelt maintained that Germany might "hanker" after a coaling station in the West Indies under the guise of "commercial purposes."

> It is the thin end of the wedge and I do not like the move at all. A coaling station is what Germany most lacks in our waters and the Kaiser could use this commercial station for warships. He is restless and tricky and this ought to be looked after. It is and always has been a danger point.[35]

As long as Germany did not possess a coaling station in the Western Hemisphere, its chances of defeating the American battle fleet would be greatly reduced.

In the spring of 1912 the German Government dispatched the most modern addition to their fleet, the battle cruiser S.M.S. *Moltke*, on a good will tour of American ports on the Atlantic seaboard. Instead of producing amity, however, *Moltke* created a sensation in the press that almost amounted to a "naval panic." The *Washington Post* ran an editorial on 1 June 1912 entitled, "Pride of Our Navy Outclassed." In the press *Moltke* was depicted as a warship that could rapidly strike across the Atlantic and attack the defenses of the soon to be completed Panama Canal before the slower American battle fleet could respond. The officers from the Office of Naval Intelligence who inspected *Moltke* paid special attention to discovering its steaming radius. In making the journey from Germany to Hampton Roads at the relatively fast speed of 15 knots, *Moltke* could steam about 3,000 miles; or in other words, it could make a voyage from Germany to

the Western Atlantic. The intelligence officers discovered, however, that *Moltke* had made the voyage direct from Germany only by storing coal in "various bins about the gun deck and apparently all the broadside gun compartments were filled with coal." The speed and efficiency of the German crew in coaling their ship further impressed the American intelligence officers. With *Moltke*, Germany possessed a capital ship with a transatlantic steaming capability that seemed to upset previous estimates of the time needed for a German Fleet to attack American possessions in the Western Hemisphere.[36]

Of course, no German armada crossed the Atlantic to seize territory in the Western Hemisphere, and the most impressive demonstration of long-distance steaming by coal-burning battleships involved the Battle Fleet of the U.S. Navy—the voyage of the Great White Fleet. This celebrated 14-month cruise around the world by 16 American battleships, without any major mechanical mishaps, was an amazing engineering feat for a fleet of pre-dreadnought battleships.[37] It is possible to gain an even greater appreciation of the magnitude of this undertaking when the voyage of the Great White Fleet is compared to the long-distance naval movements of the other Great Powers in this period. The largest comparable movement of German battleships away from European waters took place in 1900, when the Second Division of the First Battle Squadron, a total of four battleships and thus only a quarter of the size of the American Fleet, was dispatched to help reduce the Taku forts guarding the approaches to Peking.[38] Perhaps the best known example of a fleet movement of this era is the ill-fated voyage of Admiral Rozhdestvenski's Baltic Fleet to the Far East during the Russo-Japanese War. Yet this fleet numbered only eleven battleships; five less than the number in the Great White Fleet.[39] Even Britain's Royal Navy, with its worldwide security interests, never deployed more than seven battleships to the Far East in this period. In the words of one thrilled Congressman: "No other power, not even England, whose drumbeat is heard around the world, ever sent such an enormous fleet around the world."[40]

Behind the fine fighting facade presented by the fleet and the success of its diplomatic mission, the voyage of the Great White Fleet showed once again how completely dependent the United States was on the good will of Great Britain for its fleet movements. Without British supplies of coal, colliers, and bases, the voyage would not have been possible. In the decade after the Spanish-American War none of the General Board's recommendations for the establishment of coaling stations had been met, and the Navy's eight colliers were woefully inadequate to meet the logistics needs of supporting the battle fleet across the Pacific. In order to supply the fleet with the 430,000 tons of coal it consumed during the round-the-world cruise, the Government hired one Austro-Hungarian, seven Norwegian, and forty-one British ships to deliver coal to various ports along its route.[41] Despite these arrangements, the fleet frequently found itself short of coal because scheduled deliveries failed to arrive on time. In Australia and New Zealand the failure of British colliers in meeting their contracts caused Admiral Sperry "great embarrassment." At Auckland only three of the expected six colliers arrived; and at Albany, only four of the scheduled six colliers appeared. In a letter to his son, Sperry complained that Britain could make the American Fleet the "laughing stock" of the world by stranding it in Australia without coal to move. Only by inducing local coal dealers to cancel their contracts did Sperry find the coal he needed to complete the next leg of his voyage to Manila.[42] This episode in Australia only

too clearly shows the inadequacy of the logistics resources available to the United States in this period. As Senator Hale correctly observed, "the greatest fleet of formidable ships the whole world has ever seen" must depend "on the indulgence of foreign powers."[43]

The world cruise did benefit American naval planners by giving them important practical experience to serve as a guide in the fashioning of naval policy and war planning. One particularly useful exercise occurred when the battle fleet steamed 3,850 miles from Honolulu straighr across the Sourh Pacific to Auckland, New Zealand, the longest single leg of its voyage. Bags of coal stowed on deck supplemented what was held in the fleet's fully laden bunkers. This run showed that American battleships possessed the capability of steaming directly from Hawaii to the Philippines without coaling en route and still remain in good mechanical condition. The importance of Hawaii, as the location of the Navy's principal strategic outposr in the Pacific, was thereby heightened at the expense of Philippine base projects. The inability of the Army and Navy to agree on a site for a base in the Philippines certainly served to strengrhen this contention, and on 8 November 1909 the Joint Army and Navy Board recommended that no major naval base should be established further west in the Pacific than Pearl Harbor. A fleet based on Pearl Harbor would "control the Pacific and provide strategic defense" of the Philippines and the west coasr of the United States. In the Philippines rhere need only be established a stock of coal and a naval magazine that could be protecred by the Army's guns on Corregidor. The Navy also learned that the rime needed ro move the battle fleet from the east coast to the Pacific was 75 days, rather than the earlier projection of 120 days. This time would be cut even further once the Panama Canal was completed. Armed with this experience, the Navy could anticipate an earlier move across the Pacific in case of war with Japan.[44]

The vast distances to be overcome in a war against Japan in the Pacific ran contrary to the constraints imposed on operations by coaling and the short war dogmas of the age. Coal ried a fleet to its base; but the United States possessed no secure, well-stocked bases in the Pacific. Only by the dangerous expedient of establishing advanced bases as it moved could rhe battle fleet be supported in rhe Western Pacific. The logistics problems of coaling thus prohibited a knockout blow being delivered early in the war by the big guns of rhe battleline: a war with Japan instead would entail a protracted conflict centered on rhe bases set up along the fleet's line of advance. Mahan feared that this slow advance would enable Japan to "hold our till the American people weary of the war." Yet his operational plans to speed the tempo of an advance to the Japanese home waters were rejected by Naval War College planners primarily because of the limitations in steaming distance of coal-driven battleships.[45] As has been shown, American planners considered these limitations a distinct advantage in any coming conflict with Germany in the Atlanric; but in the situation of war with Japan, the problem of coaling in conjuncrion with the vast distances to be rraversed in the Pacific would weigh heavily against the chances for success.

The dimensions of this logistics nightmare could be somewhar reduced, however, by the use of oil fuel in warships instead of coal. As a naval fuel, oil possessed many advantages over coal. Oil has roughly twice the thermal content of coal, which means that for any given weight of fuel and machinery a ship can steam twice as far. Moreover, oil can be stored throughout the ship and pumped ro the furnace; thereby eliminating the need for stokers and reducing by half the personnel required to tend the engines. Oil also had

the great operational advantage of permitting a fleet to refuel at sea from tankers.[46]

Beginning in 1897, the U.S. Navy experimented with oil fuel for marine engines, and by 1904 there existed an impressive amount of evidence showing its great potential in warship construction. Despite this evidence, the Navy moved very slowly in shifting to oil and lagged behind Britain in building oil-burning warships. Perhaps the most important reason for this caution was the fear that domestic supply would not be sufficient to meet the Navy's needs. In a letter to Secretary Geroge von L. Meyer, the Chief of the Bureau of Steam Engineering expressed this fear:

> A deterrent affecting the use of oil to even our present limited extent has been the fear of a failure of the supply. With the general use of oil by all navies, which now seems inevitable, and the probable considerable increase in its use for commercial purposes, this uncertainty of supply might develop into a condition menacing the mobility of the fleet and safety of the nation.[47]

One way to ensure the Navy's supply of oil was to set aside rich oil lands in the western states and create a strategic petroleum reserve. On 27 September 1909 the Taft administration began the project by withdrawing lands in California at Elk Hills and Buena Vista Hills, that were subsequently organized 3 years later into Naval Petroleum Reserves 1 and 2. The Wilson administration added to these California sites the famous Teapot Dome reserve in Wyoming in 1915. Even with the creation of these reserves, many in the Navy Department continued to fear the depletion of domestic oil sources and dependence on foreign markets.[48]

In conjunction with the creation of oil reserves, the Navy began to adopt oil fuel for its battleships. Oil was first used in battleships in the "mixed firing" technique where it is sprayed on burning coal to increase furnace efficiency by reducing ash. Not until the *Nevada* class, authorized by Congress in 1911, did the Navy decide to rely entirely on oil fuel for its battleships. With this step, not only battleships, but the entire fleet was committed to oil. Secretary Daniels correctly observed that the "recent tests of the *Nevada*, the first dreadnoughts equipped for the exclusive use of oil as motive power, emphasize the growing need of a large supply of oil for the Navy."[49] To shift to oil had important strategic consequences as well with regard to the disposition of the fleet. Oil fuel would be especially useful for warships operating in the Pacific. In 1907 one oil industry journal stridently called on the Navy to start construction of oil-burning ships for the Pacific:

> With fuel regarded as the pivot upon which victory or defeat would swing in case of hostilities on the Pacific, inaction on the part of the navy department in equipping a Pacific squadron with oil-burning apparatus, can be characterized as nothing short of criminal negligence. It is [a] question of highest efficiency. If "full preparedness" is the watchword of the navy department, then it does not live up to it, if there is further delay in actively recognizing crude oil as fuel on board warships.[50]

Four years later, Chief Engineer Hutch I. Cone echoed these sentiments when he told a gathering of the Navy League that the construction of oil-burning battleships would greatly ease the fuel problem in the Pacific. Because oil fuel was cheaper than coal in the Pacific, and the proximity of the oil reserves to the coast ensured supply in a crisis, the earlier financial and transportation problems that kept the battleships concentrated in the Atlantic no longer mattered in deciding where to concentrate the fleet.[51]

By 1913, the General Board anticipated the gradual decline of coal consumption by the Navy as oil-driven ships entered the service. As a guide to policy, the Board moreover gave priority to the construction of fuel stations in the Pacific over those in the Atlantic. In the Pacific, where coal piles had not been established anyway in the quantity desired by the Board, the advantages of increased radius of operations of oil-burning ships would be more useful. Within little more than a decade of this recommendation, the Navy consumed the insignificant amount of 15,000 tons of coal annually in the Pacific even though the number of warships based on the west coast had increased dramatically.[52]

With the conclusion of the First World War and the surrender of the Kaiser's *Hochseeflotte*, Secretary Daniels ordered the creation of a powerful Pacific Fleet, commanded by Adm. Hugh Rodman, in the spring of 1919. The core of Rodman's fleet, eight new oil-burning battleships, passed through the Panama Canal and steamed north to a Presidential fleet review at Seattle on 13 September 1919. It is difficult to disagree with Braisted's conclusion that the movement of Rodman's fleet to the Pacific, in conjunction with the opening of a modern drydock at Pearl Harbor in August 1919, "epitomized the reappearance of the United States as a great naval power in the Pacific."[53] American naval strength in the Pacific was further augmented by the Navy Department's decision to replace four coal-burning battleships with four oil burners in the spring of 1921. While the Navy continued to lack adequate shore support in the Pacific to dock this fleet, this movement of battleships, and the shift in American strategic focus that it represented, ensured the gradual development of west coast naval facilities. The adoption of oil fuel greatly aided this shift.[54] The advantages of oil fuel were dramatically shown by a cruise of the Pacific Fleet to Hawaii in the fall of 1920. On the voyage out the fleet speed was held down to 12 knots by the coal-burning battleships. This exercise convinced Rodman, and most other naval officers, that the ability to operate in the Pacific depended on oil. It also demonstrated the difficulties of operating coal- and oil-burning battleships together. No commander afloat would want to steam into battle with the flag-hoist signal: "Coal burners to the rear."[55] If the fleet was not encumbered by coal-burning ships its speed and tactical efficiency would be much higher. The lessons of these exercises can be seen in the recommendations of the Navy Department of the interwar period that the six coal-burning battleships be converted to oil. With this conversion the range of these battleships would almost double. The most impressive demonstration of the endurance and range of oil-burning warships in this period occurred, however, in 1925 when the American battle fleet steamed 13,000 miles to New Zealand and Australia after the conclusion of joint Army-Navy maneuvers in Hawaiian waters. Commanded by the former Chief of Naval Operations, Adm. Robert E. Coontz, this force, numbering 46 ships (11 of them battleships) and 23,000 men, was supplied during this cruise by the 13 auxiliaries of its own service support.

In Australia and New Zealand the battle fleet received a warm welcome, one paper called it the "mightiest armada ever seen in New Zealand waters." Coontz' force certainly dwarfed the British "Special Service Squadron," consisting of the two battle cruisers *Hood* and *Repulse*, that had visited Australasian waters 2 years earlier.[56] Thus even before the tragic "Andrianople" of the British Empire in 1941, when the battleships *Prince of Wales* and *Repulse* went down, politicians and popular opinion in Australia and New Zealand recognized that their security

depended on an American naval "umbrella" rather than the Royal Navy.

This shifr to oil fuel had the added advantage that rival Great Powets were not as fortuitiously endowed as the United States in domestic oil production. Oil industty bulletins estimated that Germany depended on the United States for 80 percent of its oil supplies in 1914. Because it did not possess domestic sources of oil, Getmany continued to depend upon coal-fired machinety for its battleships through the Fitst World War. This testticted the radius of operations of German capital ships and made virtually impossible the notion of raiding Allied sealanes in the Atlantic. The Japanese Empite, the other feared antagonist of the General Board before 1914, also lacked oil resources for its navy and depended on American and Btitish fitms for supplies. Japanese leadets knew that any naval competition with the United States would need to take into account the question of oil and not just comparisons of capital ship strength. Japan's vulnerable strategic position was graphically demonstrated in the use the United States made of the "oil weapon" during the diplomatic crisis before Pearl Harbor, and the stationing of their battle fleet in Southeast Asia, where it would be closer to the sources of oil production, instead of in the home islands before the great naval battles of 1944.[57]

Even Great Britain's naval supremacy, that had heavily depended on coal, was called into question by the shift to oil fuel for warship machinery. Despite the heroic efforts of Winston Churchill and Jackie Fisher, the earlier advantage of dominating the world's coal trade was rapidly being eroded.[58] To the doubters that questioned Churchill's oil policy, the First World War convincingly demonsttated the necessity of oil in modern war. Lord Curzon said at the time that the Allies "Floated to victory on a sea of oil." The bulk of this oil, perhaps over 80 percent, came from the United States.[59] A stattling ttansfotmation had taken place during the course of the war, with the Royal Navy becoming dependent on Amettican sources of oil. Moteover, the submarine peril demonsttated the precarious nature of this oil lifeline. During several months of 1917 the Royal Navy expetienced a ctitical shortage of oil fuel: stockpiles wete down to 3 weeks' supply as a whole and to 6 days' supply at some bases; limitations had to be imposed on fleet movements to consetve fuel.[60] The British Government was forced to send what one recent writer has tetmed, "utgent and humiliaring" relegrams to the United States "warning that the Royal Navy would be immobilized unless the American government made available . . . the necessary supplies of naval fuel to Britain." In September 1917 the Admiralty directot of stores tepotted that "without the aid of oil fuel from America our modern oil-burning fleet cannot keep the seas."[61] The American dispatch of four coal-burning battleships in November 1917 (with one more being sent later) to form the Sixth Battle Squadron of the Grand Fleet, rather than the more modern oil-fited battleships, shows how the problem of oil supply could affect naval deployments.[62] Reflecting on this wattime experience, Secretary Daniels wrote: "The war on sea and in the air as well as on land has depended so much on transportation that it can be laid down as a basic principle that no nation that does not control an adequate oil supply can successfully maintain its forces in the field."[63]

With the conclusion of the war, oil emerged as a major irritant in Anglo-American relations. The oil crisis of 1917 had graphically demonsrrated to British leaders their country's critical dependence on American oil. As a way to decrease this dependence, the British Government tried to gain control of Middle East oilfields and exclude American companies from participation. In a

speech in March 1920 by the First Lord of the Admiralty Walter Long said that "if we secure the supplies of oil now available in the world we can do what we like," and that "the nation must take care to occupy the house, or others will take it, and with it the key to all future success."[64] The subsequent San Remo agreement between Britain and France a month later served to further fuel the antagonism between the United States and Great Britain. One commentator, writing in *The Fortnightly Review*, compared this antagonism to the imperial rivalries in the Far East: "The world is in danger of drifting into much the same sort of struggle over oil concessions as was waged twenty odd years ago over China; and the chief protagonists in the struggle threaten to be Great Britain and the United States."[65]

The U.S. Navy clearly recognized the political and strategic advantages of America's commanding position in world oil production. In a memorandum to the Secretary of the Navy dated 5 May 1911, the Chief of the Bureau of Steam Engineering drew attention to the "probability of an eventual demand for petroleum greatly exceeding the supply, together with the fact that we produce the greater part of the world's supply, should give us a distinct advantage over other nations. The control of our exports of oil might limit the extent of the adoption of the oil engine by our possible enemies." Two years later in a report to the Secretary of the Navy entitled "Supply of Oil Fuel at a Reasonable Price," Admiral Dewey strongly endorsed the adoption of oil fuel for the fleet: "The military advantages of burning oil, the advantage to the United States in being the greatest oil producing country, and the added advantage that the Navy has its own oil-bearing lands, are all so great that the return to coal burning could only be viewed as a calamity."[66] Oil would be the foundation of American overseas expansion much as coal served to underpin British imperial policy.

Of course, the advantage possessed by the United States because of its oil production did not necessarily translate into improved readiness for the Navy. The compromise at the Washington Conference, whereby the Japanese accepted an inferior tonnage ratio for their capital ships of 60 percent of the American strength in return for the nonfortification Article XIX of the naval treaty, prohibited base development in the most likely theater of operations.[67] Given the tight-fisted policies of the Congress and Republican administrations during the interwar period, when it proved difficult to find funding for fuel to conduct large-scale maneuvers, perhaps the United States did not surrender much in Article XIX. Moreover, the Navy managed to offset partially its lack of bases by retaining the 35,000-ton limitation on battleships when both the British and the Japanese Governments wanted to establish an even smaller tonnage for capital ships.[68]

It must also be remembered that the other great naval powers found the problems of finding fuel supplies even more daunting. The establishment of oil stocks at British bases proved to be a favorite item for reduction by Treasury officials during the interwar period, and the development of the Singapore base, lynchpin of the Empire's security in the

## BIOGRAPHIC SUMMARY

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Pacific, progressed only haltingly. During the Second World War, fuel problems frequently hindered British naval operations. One glaring instance occurred during the hunting of the German battleship *Bismarck*. On the run to the French ports, the pursuing British battleships almost had to call off the chase because they were critically short of fuel, and no tankers existed to refuel them at sea.[69] Nothing better shows the startling reversal of British naval fortunes. The U.S. Navy meanwhile overcame the sizable logistics problems of moving the fleet across the Pacific to the Japanese home islands during the Second World War. It is difficult to imagine this hazardous undertaking succeeding without the benefits of oil fuel. The foundation for America's naval supremacy after 1945 was laid over two decades earlier with the shift to oil fuel for the fleet. America's global military deployments continue to depend on this vital commodity.

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4. Report of Summer Conference, 1912, Part II: Strategic Problems, p. 65, Record Group 12, Naval War College Archives.

5. Dewey to Secretary of the Navy, 11 September 1905, General Board File 420, Operational Archives, Naval Historical Center, Washington Navy Yard.

6. John D. Alden, *The American Steam Navy* (Annapolis: Naval Institute Press, 1972), pp. 224, 229. See also photograph of the U.S.S. *Michigan*, coaling at sea from the collier *Cyclops* in Norman Friedman, *Battleship Design and Development, 1905-1945* (New York: Mayflower Books, 1978), p. 90. The best account of the changes brought to naval strategy and tactics by steam propulsion, and the fuel problems caused by coaling remains Bernard Brodie, *Sea Power in the Machine Age* (Princeton: Princeton University Press, 1941), pp. 78-123.

7. J. Ellis Barker, "Coal and Shipping: The American Danger," *The Fortnightly Review*, 1 February 1921, pp. 255-266.

8. See the important article by Lamar J.R. Cecil, "Coal for the Fleet that had to Die," *The American Historical Review*, July 1964, pp. 990-1005. Because of the difficulties in transporting coal from the Donets region to St. Petersburg, Russia's Battle Fleet depended almost entirely on imported British coal.

9. See Geoffrey Kemp and John Maurer, "The Logistics of the *Pax Britannica*: Lessons for America," paper presented at the Ninth Annual Conference of the International Security Studies Program, The Fletcher School of Law and Diplomacy, 23-25 April 1980. Britain's domination of international cable communications should not be ignored either. See Paul M. Kennedy, "Imperial Cable Communications and Strategy, 1870-1914," in Paul M. Kennedy, ed., *The War Plans of the Great Powers* (London: Allen and Unwin, 1979), pp. 75-98.

10. Cecil, p. 1000.

11. London had ruled that the belligerents should not send telegrams about their military operations through British ports. The authorities in Hong Kong, however, permitted American officials to determine whether their cables were about military operations.

12. William Reynolds Braisted, *The United States Navy in the Pacific, 1897-1909* (Austin: University of Texas Press, 1958), pp. 23-33.

13. *Ibid.*, pp. 28-32.

14. Quoted in Richard D. Challener, *Admirals, Generals, and American Foreign Policy, 1898-1914* (Princeton: Princeton University Press, 1973), p. 4. For the background on the development of American bases in the Pacific during the 19th century, see Seward W. Livermore, "American Naval-Base Policy in the Far East, 1850-1914," *The Pacific Historical Review*, June 1944, pp. 113-135; and Robert Erwin Johnson, *Far China Station: The U.S. Navy in Asian Waters, 1800-1898* (Annapolis: Naval Institute Press, 1979), *passim*.

15. On the General Board's policy on base development, see Daniel J. Costello, "Planning for War: A History of the General Board of the Navy, 1900-1914," Ph.D. Dissertation, the Fletcher School of Law and

Diplomacy, Medford, Mass.: 1968, pp. 65-105, 173-225. Costello nicely describes the bureaucratic fighting between the General Board, where strategic considerations predominated, and the Bureau of Equipment, that was much more closely attuned to congressional politics on bases.

16. Robert Seager and Doris D. Maguire, eds., *Letters and Papers of Alfred Thayer Mahan* (Annapolis: Naval Institute Press, 1975), v. 3, p. 399. This report, dated 21 April 1911, should be compared with an earlier Mahan study on bases, dated 15-20 August 1898, *ibid.*, v. 2, pp. 581-591.

17. In a now famous clash with the Naval War College, Mahan favored developing bases in the Aleutians and at Guam in case of war with Japan, rather than the central Pacific route for the battle fleet advocated by the officers at Newport, see Robert Seager, *Alfred Thayer Mahan* (Annapolis: Naval Institute Press, 1977), pp. 483-489.

18. Bahia Hondo, on the eastern tip of Brazil, was another advanced site sometimes advocated by the Board for base development, see Challener, pp. 37, 97-98.

19. Costello, pp. 173-225, for an account of the General Board's base proposals.

20. William Reynolds Braisted, *The United States Navy in the Pacific, 1909-1922* (Austin: University of Texas Press, 1971), p. 196.

21. Braisted, *Navy in the Pacific, 1897-1909*, pp. 220-223.

22. During the first 2 years of its existence, the General Board became embroiled in an acrimonious dispute with Radm. Royal Bradford, Chief of the Bureau of Equipment. At one point, Secretary of the Navy, John Long warned the General Board that its usefulness could be impaired if this in-fighting continued. Henry Taylor came up with a solution that Dewey called a "master-stroke," namely, make Bradford a member of the General Board. See Costello, pp. 45-49.

23. See Challener, pp. 41-42, 227-228, 233-247. This rivalry was as much a personal feud between Admiral Dewey and Gen. Leonard Wood, as it was an administrative conflict. See Dewey's initial report on Subic Bay, Rear Admiral Dewey to Secretary Long, 28 August 1898, *Papers of John Davis Long* (The Massachusetts Historical Society, 1939), pp. 188-190. Mahan favored Subic over Manila Bay as well, see Seager and Maguire, v. 3, pp. 658-662.

24. Costello, p. 183.

25. In an early study at the Naval War College, dating from 1897, the possibility of an invasion of the North American continent by the Japanese was not ruled out, though it was considered unlikely: "It is admitted that the Japanese might coal either at one of the Aleutian islands or might take temporary possession of Puget Sound . . . for the purpose of coaling." Clearly, American planners at the Naval War College thought the most likely locations of an attack would be those places where the Japanese could coal their warships. For this early study, and for the background and development of the Orange Plan, see the excellent article by Michael Vlahos, "The Naval War College and the Origins of War-Planning Against Japan," *Naval War College Review*, July-August 1980, pp. 23-41. Also see the two books by Braisted, *Navy in the Pacific, 1897-1909*, pp. 191-231 and *Navy in the Pacific, 1909-1922*, *passim*.

26. Vlahos, p. 30. This approach to the Philippines would be suggested once again, by the British in 1941, when they requested the American battle fleet move from Pearl Harbor to Singapore. See James R. Leutze, *Bargaining for Supremacy* (Chapel Hill: University of North Carolina Press, 1977), pp. 130, 189-190, 206, 234-235, 241-242.

27. War Portfolio No. 2, Reference No. 5-1, Orange Plan, Administrative Section, General Board War Plans, File, p. 1.

28. Braisted, *Navy in the Pacific, 1909-1922*, pp. 37, 129.

29. See Captain Staunton's memoranda dated 23 June 1908 and 16 April 1912, and Cdr. Clarence Williams' memorandum of 16 March 1910, General Board File 420-1.

30. Braisted, *Navy in the Pacific, 1909-1922*, p. 28; and Paolo E. Coletta, "George von Lengerke Meyer," in Paolo E. Coletta, ed., *American Secretaries of the Navy* (Annapolis: Naval Institute Press, 1980), v. 1, p. 512.

31. Report of Summer Conference, 1912, Part II: Strategic Problems, p. 67, Record Group 12, Naval War College Archives.

32. Cdr. R.R. Belknap, "Tactical Question VI: Discuss the Fleet, in general and in action," Summer Conference, 1913, Record Group 12, Naval War College Archives; and Stephen E. Pelz, *Race to Pearl Harbor* (Cambridge: Harvard University Press, 1974), pp. 25-40.

33. On these various plans, see Challener, pp. 81-178; and J.A.S. Grenville, "Diplomacy and War Plans in the United States, 1809-1917," in Kennedy, ed., pp. 23-38. The best study of the Black Plan in this era is Warner R. Schilling, "Admirals and Foreign Policy, 1913-1919," Ph.D. Dissertation, Yale University, New Haven, Conn.: 1953, pp. 1-83. Unfortunately, Schilling's study does not incorporate material from the important archival holdings of the Naval War College; thus, this study should be supplemented by Costello, pp. 128-172. It is fascinating to note that American naval planners sketched a very accurate picture of German war plans; see Holger H. Herwig, *Politics of Frustration; the United States in German Naval Planning, 1889-1941* (Boston: Little, Brown, 1976), pp. 40-92.

34. Francis B. Loomis, "The Influence of an Isthmian Canal Upon Central and South America," Lecture delivered at the Naval War College, 1901, Record Group 15, Naval War College Archives.

35. Herwig, p. 96.

36. C.C.G. Rapp to Commanding Officer of the U.S.S. *South Carolina*, 18 June 1912, Case 10548, office of Naval Intelligence. C.W. Woodward to SecNav, 29 June 1912, Case 10548, ONI. Howe to Captain of U.S.S. *Louisiana*, 15 June 1912, Case 11503, ONI. Also see the excellent article by Seward W. Livermore, "The American Navy as a Factor in World Politics, 1903-1913," *The American Historical Review*, July 1958, pp. 873-877.

37. On the voyage from the east coast to California, one battleship, *Alabama*, developed serious engineering problems when cracks appeared in its piston cylinders. Admiral Sperry, who commanded the fleet when it set out across the Pacific, blamed *Alabama*'s problems on the incompetence of its captain and engineer officer. *Alabama* did not continue on with the fleet, but remained behind in California. The other "beast" of the fleet, *Maine*, "the greatest coal eater in the fleet," also remained behind in California. *Maine* was such a great consumer of coal that bagged coal had to be carried on deck to supplement that in her fully loaded bunkers. While en route to Rio, *Maine* sent frantic messages to the other ships of the fleet asking for coal. A furious Admiral Evans refused to stop the fleet and threatened to take *Maine* in tow into Rio. The officers of *Maine*, when faced by this embarrassment, worked out a stringent system of rationing coal to cut down on consumption. Two more battleships already on the west coast, the new *Nebraska* and the reconditioned *Wisconsin*, joined the fleet for the rest of the voyage thereby keeping the number of battleships at 16. On the design and characteristics of American predreadnought battleships, see John C. Reilly and Robert L. Scheina, *American Battleships, 1886-1923: Predreadnought Design and Construction* (Annapolis: Naval Institute Press, 1980), and for an account of the voyage, see Robert A. Hart, *The Great Fleet* (Boston: Little, Brown, 1965). See also, "The Cruise of the United States Atlantic Fleet," a journal kept by Radm. Charles S. Sperry, Letters 1906-1907, Sperry Papers, Library of Congress.

38. These four battleships accomplished little in the Far East. Upon reaching Singapore they learned that the Taku forts had already fallen and Peking relieved 2 weeks earlier. Despite this news, the four battleships remained in the Far East for another year. During this period they depended on British contractors for their coal and Hong Kong for major repairs instead of Kiaochow, which the Germans had seized in 1897. The difficulties could only seem to confirm the wisdom of Tirpitz' concentration of the German battle fleet in home waters.

39. Of these eleven battleships, only four could be considered first-rate fighting units, however. On the fleet's logistics difficulties, see the excellent article by Cecil. The Baltic Fleet was in such bad mechanical shape that the fleet's Chief Engineer, Eugene Politovski, wrote his wife: "Things have come to such a pass that I can only wring my hands . . . . Such gloom overwhelms me that I feel inclined to hang myself." Denis Warner and Peggy Warner, *The Tide at Sunrise: A History of the Russo-Japanese War, 1904-1905* (New York: Charterhouse, 1974), p. 408.

40. Hart, p. 27. The calculations of the strength of the Royal Navy in the Far East comes from Michael Vlahos, "Historical Continuities in Naval Power Projection," Paper presented at the Ninth Annual Conference of the International Security Studies Program, The Fletcher School of Law and Diplomacy, Medford, Mass.: 23-25 April 1980. Also see Arthur J. Marder, *The Anatomy of British Sea Power* (New York: Knopf, 1940), pp. 302-319, 427-441.

41. No privately owned American colliers were available at the time of the world cruise to supplement the Navy's. See Hart, p. 55.

42. Australian coal proved to be much inferior to the British and American coal used by the fleet. The Fourth Division consisting of the battleships *Wisconsin, Illinois,* and *Kearsarge* (the *Kentucky* being left behind in Australia to round up deserters), which had the misfortune to be saddled with the inferior Australian coal, fell 2 days behind the rest of the fleet on the way to Manila because it was forced to steam at its most economical speed. Sperry to C.S. Sperry, Jr., 1 October 1908, Sperry Papers. Also see Hart, pp. 198-201, and Braisted, *Navy in the Pacific, 1897-1909*, p. 230.

43. Hart, p. 55.

44. It is perhaps worth noting that in Honolulu only one of the two chartered colliers arrived before the fleet set off for New Zealand. Braisted, *Navy in the Pacific, 1897-1909*, pp. 230, 237-238.

45. Seager, pp. 482-488; Seager and Maguire, v. 3, pp. 380-388.

46. For the advantages of oil, see Kemp and Maurer, *passim*, and Friedman, pp. 93-97. The advantage of refueling at sea was not used, however, until immediately before the Second World War.

47. J.O. Richardson, "Naval Petroleum Reserves No. 1 and No. 2," U.S. Naval Institute *Proceedings*, January-February 1916, pp. 105-106. Richardson later went on to become Commander in Chief of the U.S. Fleet and was relieved of this command in January 1941 by President Roosevelt because of the now famous dispute over the decision to keep the battle fleet at Pearl Harbor. See James O. Richardson and George C. Dyer, *On the Treadmill to Pearl Harbor* (Washington: Naval History Division, 1973), *passim*.

48. Richardson, "Petroleum Reserves," p. 123. Also see David A. Rosenberg, "The U.S. Navy and the Problem of Oil in a Future War: The Outline of a Strategic Dilemma, 1945-50," *Naval War College*

*Review*, Summer 1976, *passim*. On the early development of the Navy's oil policy, see John A. DeNovo, "Petroleum and the United States Navy before World War I," *The Mississippi Valley Historical Review*, March 1955, pp. 641-656.

49. Secretary of the Navy, *Annual Report*, 1915, p. 62.

50. DeNovo, p. 644.

51. Braisted, *Navy in the Pacific, 1909-1922*, pp. 28-29.

52. *Ibid.*, pp. 38-39.

53. *Ibid.*, p. 509.

54. On this shift, see *ibid.*, pp. 535-548; and Gerald E. Wheeler, *Prelude to Pearl Harbor* (Columbia: University of Missouri Press, 1963), pp. 58-67.

55. Wheeler, pp. 116-117.

56. On this cruise, see Robert E. Coontz, *From the Mississippi to the Sea* (Philadelphia: Dorance, 1930), pp. 446-464; Roger K. Heller, "Curtis Dwight Wilbur," in Coletta, ed., v. 2, pp. 621-623; Lawrence H. Douglas, "Robert Edward Coontz," in Robert William Love, ed., *The Chiefs of Naval Operations* (Annapolis: Naval Institute Press, 1980), p. 34; Stephen Roskill, *Naval Policy Between the Wars: Vol. I, The Period of Anglo-American Antagonism, 1919-1929* (London: Collins, 1968), p. 289.

57. DeNovo, p. 649, n. 3, for German dependence on the United States for oil. German fears about interruption of oil supplies proved well-founded as the First World War showed. By the end of 1918, Germany possessed only a few weeks' reserves to carry on the war, see L. Grebber and W. Winkler, *The Cost of the World War to Germany and Austria-Hungary* (London: Oxford University Press, 1940), p. 45.

58. See Winston S. Churchill, *The World Crisis* (New York: Scribner, 1923), v. 1, pp. 133-145. Also see Kemp and Maurer, *passim*.

59. W.G. Jensen, "The Importance of Energy in the First and Second World Wars," *The Historical Journal*, 11, 3, 1968, pp. 543-544.

60. Arthur J. Marder, *From the Dreadnought to Scapa Flow* (New York: Oxford University Press, 1961), v. 1, p. 271.

61. G. Gareth Jones, "The British Government and the Oil Companies 1912-1924: The Search for an Oil Policy," *The Historical Journal*, 20, 3, 1977, pp. 657-658, 661.

62. Gerald E. Wheeler, *Admiral William Veazie Pratt, U.S. Navy: A Sailor's Life* (Washington: Naval History Division, 1974), pp. 103-104.

63. Secretary of the Navy, *Annual Report*, 1918, p. 138.

64. Roskill, p. 219.

65. Sydney Brooks, "Oil as an Anglo-American Irritant," *The Fortnightly Review*, 1 March 1921, p. 392. The United States showed its continued interest in Middle East developments. In the spring of 1919 President Wilson demonstrated this concern by dispatching the battleship *Arizona* to Turkish waters to reinforce the naval mission of Radm. Mark Bristol. A little more than a quarter of a century later, another famous American battleship, *Missouri*, would perform a similar mission.

66. DeNovo, pp. 647, 650.

67. On the Washington Conference, see Roger Dingman, *Power in the Pacific* (Chicago: University of Chicago Press, 1976), pp. 196-219. For the budgetary battles of the interwar period, see Wheeler, *passim*. On the problems of basing the battle fleet in the Pacific during the diplomatic crisis before the American entry into the war, see Richardson, *Treadmill to Pearl Harbor, passim*.

68. The Navy also wanted to retain 10,000 tons for displacement in cruisers. One General Board paper prepared for the Second London Naval Conference explains this relationship between strategy, bases, warship design, and arms control: "Naval strength is essentially a composite of fleets and bases. The United States has few bases throughout the world and no secure base in the Western Pacific . . . . In order that this handicap may be minimized, the United States needs vessels of the greatest practicable *power of survival* . . . . The capital ship is the essential basic unit of a high seas fleet. Reduction in displacement vitally reduces its power of survival." Cited in Pelz, p. 93.

69. Britain also faced enormous logistics problems when they arrived to support the operations of their Pacific Fleet at the end of the war against Japan, see John Winton, *The Forgottem Fleet* (London: W.H. Allen, 1970), *passim*.

*The Shore Establishment of the Navy is managed by a mix of senior military and civilian personnel working closely together. There are many strengths in the system, including the different skills the managers bring to their position. Ideally, the knowledge of the operating forces and the fresh perspectives brought by the military officer are blended with the continuity and procedural and technical competence of the civilian. The relationship is not always smooth, however, and a first look is provided here.*

# THE RELATIONSHIP BETWEEN SENIOR NAVY CIVILIAN AND MILITARY EXECUTIVES

by

**Laurie A. Broedling, Alan W. Lau, and Arthur Newman**

**Introduction.** The role of career civil service employees in the Department of Defense (DOD) has been surprisingly neglected. Virtually all the systematic attention paid to civilians working in the Defense Establishment has been directed at noncareer civilians. These represent political appointees who serve in the top policymaking positions, usually for a short period of time. They are few in number. On the other hand, civil service personnel in the Military Establishment number almost one million, thus representing almost one-third of all DOD's manpower and almost one-half of the entire federal civil service work force. Moreover, they represent an extremely stable work force with very low turnover. These career civilians are generally concentrated in a variety of areas of military support, particularly weapons maintenance, weapons procurement, and R&D. Moreover, there are senior career civilians in almost every headquarters function. The only area in which civil servants have little direct involvement is actual military operations. In view of their influence on the Defense Establishment, it is important to make this group an object of academic inquiry.

Any inquiry inro the role of career civilians in DOD necessarily includes their relationships with military personnel. In many instances, civilian and military personnel work very closely together. While there is a paucity of systematic research describing this relationship, there is no lack of anecdotal information. Anyone who has worked in an organization with a military-civilian mix knows there is a plethora of generalizations, stereotypes, myths, jokes, and labels applied to each group and to their relationship. Among orher things, the civilian group is often characterized as doing just enough to get by, being clockwatchers ("Don't

stand in the hall at 1600 or you'll get trampled in the stampede"), and wedded to an embedded set of bureaucratic procedures. The military group is often characterized as unnecessarily obsequious to their military superiors, primarily interested in doing whatever is necessary to get promoted rather than whatever is best for the organization ("ticket punching"), trying to reinvent the wheel, and only being interested in quick fixes (so improvements are made on "their watch"). In general, there seems to be little doubt that the problem of civilian-military animosity exists and is having detrimental consequences on the U.S. Military Establishment.[1] Moreover, of all the sociological problems confronting the U.S. military, this is the only one that has received almost no institutional or academic attention. This is indeed surprising, given the probable extent of its negative effect.

It should not be surprising that this animosity and stereotyping occurs. The situation has most of the elements that create bias, misunderstanding, and conflict between differing groups of people. The two groups are selected differently, have different expectations, and are administered under vastly different personnel systems.[2] Because this seems to represent a real source of prejudice, perhaps we even need a label for it to indicate its parallel to other, more familiar biases such as racism and sexism; and because there seems to be no preexisting label that is appropriate, we will take the liberty of coining a term, *milicism*, to describe the phenomenon.

While some of the stereotyping mentioned above seems to occur wherever there is a military-civilian mix, the exact nature of the stereotyping varies with the organizational unit and the type of people involved.[3] In the Navy, for example, units doing maintenance (e.g., shipyards, public works centers) differ from R&D field units in that relatively more of the technical decisionmaking is done by the military in the maintenance units than in the R&D units. The keyword here is "relatively"; both types of units are almost entirely manned by civilians except for a handful of the top positions. Also, in maintenance units there is, on the average, more demographic disparity between the military and civilians, with the former having more formal education, representing less of an ethnic mix. In the R&D units military and civilian personnel tend to be more similar to one another in terms of socioeconomic characteristics. This relationship also differs between field and headquarters activities. In the field, the structural relationships are quite clearly defined and in the same pattern across similar types of field units. In headquarters units, there is no predominant structural pattern; military personnel work for civilians or vice versa; a few military personnel work with many civilians or vice versa. In headquarters units, the socioeconomic status and demographic characteristics of most civilian and military personnel who work together tend to be fairly similar. In summary, while general patterns of attitudes and stereotyping exist across DOD, there also seem to be differences in their exact nature depending upon the specific type of organization involved. Empirical research would help to better define and describe the phenomenon of milicism.

**Relationship Between Navy Civilian and Military Executives.** Given the general lack of documented research on this topic, a major purpose of this paper is to present research findings on the relationship between career civilian and military executives in the Navy. These findings are drawn from a job analysis of senior career civilians in the Navy. The details of the full study design and all the findings are documented elsewhere.[4]

**Study Method.** The two sets of participants in the study were a representative sample of (1) career civilian executives, i.e., those in GS-16, 17, 18 or equivalent Public Law positions and (2) military executives who supervise civilian executives or influence policy regarding their employment. Sixty percent of the civilian executives are in headquarters and 40 percent in the field. The majority of them work in areas related to weapons system research, development, or procurement. Three-quarters of them work in organizations that deal primarily in the physical sciences or engineering. Data were collected in a variety of ways, including personal interviews, work diaries kept by executives of their daily activities (civilian executives only), observations of the work activities of executives, and structured questionnaires.[5] The information was collected between July 1977 and March 1978.

**Study Findings.** The civilian-military executive relationship has at least three aspects, structural, functional, and attitudinal. The first relates to the administrative systems that govern civilian and military positions; the second to how military and civilian executives function in their jobs; and the third to the opinions and perceptions that civilian and military executives hold toward one another based on their group membership. These three aspects are interrelated, with structure, function and attitudes all influencing one another.

**ADMINISTRATIVE SYSTEMS.** A number of important issues were identified in this regard. One pertains to the general differences between the military and civilian personnel systems. Another to that specific part of the civilian personnel system regulating the executive ranks. The last pertains to the changes that have occurred in the civilian personnel system and its relationship to the military system.

The military and civilian personnel systems are, in general, very different, with civilians being administered under the civil service system applicable to almost all federal employees. This difference may in fact be the single most influential factor that distinguishes the two groups. The military personnel system is administratively centralized, with promotions and reassignments being performed by a headquarters group. The civilian personnel system is, on the other hand, much more decentralized, with most decisions made at the local level within individual Navy organizations. The military system is based primarily on a rank-in-the-person concept while the civilian one is based primarily on a rank-in-the-job concept. Among other things, this means that one's military rank is dependent primarily on one's demonstrated abilities and qualifications relative to all other similar people in the Navy. It means that one's civilian rank is dependent on the characteristics of the job one is filling. Therefore, the official characteristics of the job are considerably more important to civilians than to military. Also, competition for most civilian jobs tends to be relatively restricted.

Another area of major difference is the performance evaluation systems for the two groups. Distinguishing characteristics include: (1) military promotions are based on the number allowed in each rank while civilian promotions are based on specific jobs to be filled; (2) military promotions are based primarily on periodic "fitness reports" while civilian promotions are based primarily on evaluations made at the time of the promotion decision rather than on the periodic performance review; (3) the official forms and ratings to be given differ.[6] All these differences relate to yet another crucial distinction: The military system is essentially a rotational one in which people are

periodically transferred and promotions are usually to new assignments in different organizations; the civilian system is essentially a stable one in which many people spend large portions of their career (or even their full career) in the same organizational segment, progressing within a given career ladder. Another related aspect is that the civil service system, far more so than the military system, encourages specialization. Last but not least, the systems differ in terms of job security.

While the preceding discussion describes the civilian personnel system in general, it should be noted that, at the time of this study, there was a special system for administering executive level positions. The Navy's Civilian Executive Management Board and its subpanels had responsibility for allocating executive billets, filling executive positions, and providing for executive development. Consequently, there was some centralization of administration introduced at the executive ranks. In actuality, however, there was still a fair amount of decentralized control exercised in this process. Also, while executive development was part of the Board's official charter, this part of the charter was not acted upon.

In Ocrober 1978 two very importanr structural changes were made affecting Navy civilians in general and Navy civilian executives in particular.[7] These were the Navy's Total Force reorganization and the Civil Service Reform Act. Since 1966 the Navy's Office of Civilian Personnel, which was responsible for implementing and executing civilian personnel policy, reported directly to the Navy's Secretariat rather than via the military chain of command. In other words, no one in the military structure, including the Chief of Naval Operations, had formal authority for implementing civilian personnel policy. Since 1966 this organizational arrangement had been continually questioned and, sometimes bitterly, disputed. The feeling on the part of the majority of both civilian and military executives interviewed in this study was that the arrangement was a definite problem because the Military Establishment had responsibility but not sufficient authority for managing the civilian work force. On the average, military interviewees felt more strongly in this regard than did civilian interviewees. Additional fuel to the reorganization fire was added by growing criticism from Congress regarding the inadequacy of the Navy's manpower planning system. One of the primary cited failures was the lack of integration between the systems for planning civilian and military manpower. Questionnaire responses in our study given in the spring of 1978 regarding the effects of integrating civilian and military manpower planning, indicated that both civilian and military executives believed the effects would be generally positive. The average responses are shown in Table 1. These responses also indicate the military executives, in general, to have been somewhat more positive toward the idea than civilians.

As a result, in October 1978 the Navy was officially reorganized in accordance with what was called the "Total Force" concept. This meant that planning and policy development is to be done with an eye to the Force as a whole—including active-duty military, reserve military, civil servants, and those defense contractor employees who constitute a permanent arm of the Defense Establishment. It also meant that the civilian personnel administration function was moved under the Chief of Naval Operations, leaving only the highest level civilian policy formulation function within the Secretariat. The effect of moving the civilian personnel function under the military chain of command is profound. As with any major organizational change, it will probably take many years for these effects to be fully felt. In addition to

**TABLE 1—PERCEPTIONS OF EFFECT OF INTEGRATION OF CIVILIAN AND MILITARY MANPOWER PLANNING**

| | Civilian Executives (N = 106) | | Military Executives (N = 66) | | |
|---|---|---|---|---|---|
| Item[a] | Mean[b] | S.D. | Mean[b] | S.D. | Significance |
| Personnel use | 0.5 | 2.2 | 1.8 | 1.7 | * |
| Personnel costs | 0.6 | 1.6 | -0.5 | 1.6 | * |
| Training and development of civilians | 0.2 | 1.8 | 0.9 | 1.4 | * |
| Training and development of military | 0.5 | 1.6 | 0.7 | 1.5 | -- |
| Forecasting requirements for civilian management and executive billets | 0.0 | 1.7 | 1.4 | 1.5 | * |
| Forecasting requirements for officer billets | 0.4 | 1.6 | 0.9 | 1.7 | -- |

[a]Approximately 25 percent of both military and civilian did not respond to these items.

[b]Based on a 7-point scale where 3 = Positive effect, 0 = No impact, and -3 = Negative effect.

*$p < .05$.

integrated manpower planning, there should be at least two resulrs. One is the integration, or at least coordination, of many civilian and military personnel programs that heretofore have been developed completely independently, such as Equal Employment Opportunity (EEO), and management development. The second is that military line managers will assume more responsibility for the civilians who work for them.

It is quite extraordinary that a second change of equally major import also occurred in October 1978—the passage of the Civil Service Reform Act (CSRA). CSRA mandates a number of major changes in civilian personnel administration, including the use of performance standards, the streamlining of procedures to remove employees for poor performance, pay for performance at the managerial and executive levels, and executive and management development. For the executive ranks, the changes have been embodied in the Senior Executive Service (SES), which now encompasses most of those formerly in the supergrade ranks and the political appointees. One of the concepts underlying SES is rhat people at these levels should function more as general managers and should rotate across various jobs rather than remain in one organizational subunit. There are strong accompanying initiatives for managemenr and executive development to insure the SES members have the skills to fulfill this new, less parochial, role. While administration of the SES is still delegated to each agency (i.e., mobility across agencies is encouraged but not required), SES administration in the Navy seems to be more centralized than the previous Navy system. While it is too early to be certain, it seems as if the mobility concept for executives will be acted on in the Navy. As with the Total Force reorganization, it will be many years before the full effects of the CSRA will become apparent.

**FUNCTIONS.** Civilian executives interact closely with military executives.

Many civilian executives are supervised by, share their jobs with, or supervise military officers. For example, 97 percent of the military executives in the sample reported work-related interactions with civilian executives at least once a day. With respect to job sharing, it was frequently pointed out in the interviews, that executive jobs are shared by two or more people. For example, a laboratory is often run by a commanding officer and a technical director. In response to the civilian questionnaires, 60 percent reported that they share the responsibilities of running their organizational unit with others, excluding their own department or branch heads (37 percent with military personnel; 13 percent with both military and civilian personnel; and 10 percent with civilian personnel). Finally, 76 percent of respondents to the military questionnaire reported that they share job responsibilities (21 percent with other military personnel; 24 percent with both military and civilian personnel; and 31 percent with civilian personnel).

At the outset of the study, it was assumed that civilian executives were in staff rather than line positions, providing advice to military and noncareer civilians having line authority. Questionnaire responses, however, showed that 66 percent of civilian executives describe their job as line; 20 percent as staff; and 14 percent as half line, half staff.

All of the interviewees, both military and civilian, stated that the relarionship between military and civil service personnel was important to the effective functioning of the Navy. Several noted that the intent of the civilian-military mix is to have civilians provide the continuiry and corporate memory; and the rorating military, new suggestions as well as knowledge about fleet needs. When this relationship works properly, the civilians prevenr the military from "reinventing the wheel" and provide them with technical and procedural knowledge about how to get things done in the system; and the military prevent the civilians from becoming too ingrained in the same way of doing things and from losing touch with fleet needs. Thus, the relationship between military and civilian executives is intended to be complementary. All civilian interviewees felt that the fact that their job is imbedded in a military system has far-reaching implications for what they do, how they do it, and what is expected of them. They believe that there is a definite difference between DOD and non-DOD federal executive jobs.

Because most Navy civilian executives "came up through the ranks" of the Navy civil service hierarchy, rather than coming in from the private sector or even other government agencies, the civilian personnel system has had a definite effect on them. The decentralized system did encourage specialization and discouraged mobility. Therefore most civilian executives have a considerably narrower set of organizarional experiences than their military counterparts. Most military executives felt that this fact works to the disadvantage of civilian executives by the time they reach the executive level. This is because, most civilians at the executive level were found to be functioning almost exclusively as managers rather than as bench scientists or technical experts. This is true even though most came up the ranks from a technical career field and never received any systematic training or development in management. Even many civilian executives saw their lack of preparation for the managerial role as a disadvantage. With regard to mobility, however, they felt that for developmental purposes, it would be better to rotate earlier in one's career, prior to becoming an executive.

**ATTITUDES.** Given the close working relationships among civilian and military executives in the Navy's Shore

Establishment, the attitudes they hold toward one another rake on great importance. This is particularly true in those instances in which a job is shared between civilians and military. In our study we found the mutual attitudes of military and civilian executives to vary a great deal. Where artitudes were positive, all the benefits of such a complementary relationship accrued. Numerous instances of genuine teamwork and a high degree of mutual respect were discovered. On the other hand, however, some intensely negative attitudes and relationships were also discovered. While not large in number, the dysfunctional consequences for the organizations in which these occurred seemed to be profound. The majority of cases of extreme negative attitude were held by military toward civilians rather than vice versa. Moreover, the few military executives who expressed vehemently negative feelings either toward civilian employees in general or toward civilian executives as a group were for the most parr in very influenrial positions—heads of organizations manned predominantly by civilians or responsible for civilian personnel policy administration in such organizations.

In the midrange between these extremes were many civilian and military executives who respected one another as individuals but did have negative attitudes toward each other's system and attributed perceived faults to the system rather than to individuals. From the military point of view, for example, there was concern voiced over not being able to reassign civilian executives easily, thus making the military reluctant to place civilians in key, decision-making slots. In the military system if such a placement is made and does not work our, a transfer can be effected almost immediately. From the civilian point of view, for example, resentment exists over some milirary officers' propensity to make decisions based on little prior knowledge but on the "can do" attitude fostered by the military system. This is seen as a consequence of the very frequent rotation of military personnel. In general, the mutual attitudes held at the executive level were reasonably positive, probably owing to the fact rhat both groups are highly selected and because people at that level could distinguish between personal attributes and effects of the "system." All those who spoke to the general topic agreed, however, that there are definite problems with negative civilian-military attitudes and relationships at lower levels in their organizations and that this problem warrants attention.

Many military and civilian executives expressed frustration and resentment over the lack of flexibility in the civil service system for rewarding good civilian employees, punishing bad ones, and reassigning them as work demands shift. The depth of this resentment was greater on the part of milirary than civilian executives, however. In discussing these issues with staff specialists in civilian personnel administration, an interesting perceptual discrepancy emerged. The personnel administrators for the most part felt that the current system had sufficient flexibility to meet line management's goals—that one could in fact reward, punish and reassign, all within the rules and regulations. They felt that line management, particularly military line management, often could not take such actions because of insufficient knowledge about civilian personnel procedures, unwarranted preconceived norions that such actions were impossible, or simply not being willing to take the time.

To determine the specific components of the negative attitudes identified during the interviews, in the questionnaire civilian and military respondents were asked to indicate how much they agreed with a variety of statements about the military-civilian relationship. As shown in Table 2, for 9 out of the 12 items included in both questionnaires,

civilian and military responses differed significantly ($p < .05$). This indicates a fairly high discrepancy between their attitudes toward each other and their relationship. Specifically, both groups on the average felt positive about the military-civilian partnership and said that military executives solicit the advice of civilian executives. However, military executives felt that this was much more so the case than did civilian executives. Moreover, there was a slight feeling among civilian executives that they were treated as second-class citizens by military executives, while the average military executive felt that this was not the case. Military executives showed modest agreement with the idea that they know more about what is best for the Navy than do civilian executives, a point over which the average civilian executive disagreed. There was strong difference of opinion over whether civilian executives are "clockwatchers" and put in fewer working hours than do military executives. There was additional information in the questionnaire related to this issue of working hours. Respondenrs were asked how many hours per week they worked in rhe office and at home. Civilian executives reported working an average of 52 hours per week ar the office and 8 hours at home. Military execurives reporred an average of 55 hours at the office and 6 hours at home. Lastly, there was considerable difference of opinion over the comparability of military and civilian executive compensation, with the military executives feeling it is not comparable. Information gathered from the interviews indicated that many military executives feel undercompensated relative to their civilian counterparts.

During the interviews in this study it was found that many of the interviewees favored the newer concepts embodied in SES although as with all of CSRA, the pay aspects were the most controversial. Military executives, more rhan civilians, saw executive mobility as a good thing, both for developmental purposes and because it gives senior executives the opportunity to transfer easily a civilian executive who is not performing well in a given job to another job. In essence, the military interviewees saw the SES as being similar and having the same advantages as the military system.

**Discussion and Conclusions.** The Navy's Shore Establishment is managed by a mix of military and civilian personnel working closely together. This arrangement has many potential strengths. The underlying intent is to maximize the complementary nature of two groups of people, each of whom brings a somewhat different set of skills to the job. The military personnel provide knowledge of the operating forces and a fresh perspective, while civilians provide continuity and procedural and technical competence.

While in theory this complementary relationship seems well conceived, there are a number of factors that act to diminish its quality. One factor is associated with the great difference in the administrative and compensation systems governing the two groups. With the advent of CSRA and particularly SES, the differences are lessened considerably and therefore should serve to ease some of the rension. There is a danger, however, that the SES will make the two groups too much alike at executive levels, thus losing the advantage of having two different groups of people. For example, if both civilian and military executives are rorated with equal frequency, who will provide the corporate memory and procedural knowledge? Given the intense procedural complexity of the headquarters world, this could become a problem. Another factor is the social dynamics that occur between any two groups of people who are different. The biases and stereotyping that we have labeled "milicism" seem ro be representative of the processes that

TABLE 2—PERCEPTIONS OF MILITARY-CIVILIAN RELATIONSHIPS

| | Civilian Executives (N = 210) | | Military Executives (N = 66) | | |
|---|---|---|---|---|---|
| Item[a] | Mean[b] | S.D. | Mean[b] | S.D. | Significance |
| Military personnel evaluate the job performance of other military using different criteria from those they use to evaluate civilians. | 5.4 | 1.5 | 4.9 | 1.8 | * |
| How civilian executives carry out their jobs varies a great deal and depends upon their relationship with particular military personnel. | 5.6 | 1.4 | 5.5 | 1.4 | -- |
| There is a productive partnership between military and civilian executives in commands where they work together. | 5.3 | 1.3 | 6.3 | 1.0 | * |
| Military more so than civilian executives resent the job protection afforded civilians by the civil service system. | 4.7 | 2.0 | 4.4 | 1.6 | -- |
| Military and civilian executives in comparable positions get comparable compensation, all benefits considered. | 4.4 | 1.8 | 2.4 | 1.7 | * |
| High-ranking military personnel in the Shore Establishment solicit advice from civilian executives on most important matters. | 4.7 | 1.5 | 5.8 | 1.1 | * |
| Civilian executives in the Shore Establishment are often treated as "second-class citizens" by the high-ranking military. | 4.3 | 1.9 | 2.8 | 1.5 | * |
| Civilian executives have a sufficiently accurate perception of fleet requirements. | 4.2 | 1.5 | 3.5 | 1.4 | * |
| The primary function of civilian managers and executives in Navy headquarters organizations is to supply the "corporate memory" of each command. | 3.8 | 1.7 | 4.0 | 1.5 | -- |
| High-ranking military personnel in my command make most of the important decisions by themselves. | 3.7 | 1.9 | 3.0 | 1.8 | * |

| Item[a] | Civilian Executives (N = 210) Mean[b] | S.D. | Military Executives (N = 66) Mean[b] | S.D. | Significance |
|---|---|---|---|---|---|
| Military executives generally know more about what is best for the Navy than civilian executives. | 3.4 | 1.6 | 4.3 | 1.6 | * |
| Civilian executives are more often "clockwatchers" and put in fewer working hours than do military executives. | 2.3 | 1.8 | 4.1 | 1.8 | * |
| Military personnel in the Shore Establishment are not sufficiently informed, given their level of authority. | 4.5 | 1.8 | -- | -- | N/A |
| Civilian executives should not desire to make final policy; their role is strictly a staff one. | 1.7 | 1.2 | -- | -- | N/A |
| Civilian executives would be more fully used and trusted by military personnel if they had a broader range of job and organizational experience. | 4.0 | 2.2 | -- | -- | N/A |

[a]The last three items were not included in the military questionnaire.

[b]Based on a 7-point scale, where 1 = Not at all true and 7 = Very true.

*$p < .05$.

occur in the more familiar ethnic and sexual "isms" of our society.

A third and closely related factor is the exposure patrerns of the two groups. Many military executives have not worked directly with civilians until well into their careers. We found some military executives in our sample who had had no such experience until they attained flag rank and then were given direct responsibility for large numbers of civilians. Many military officers spend years in the fleet hearing the popular stereotypes and jokes about civilians without ever having had the opportunity to be exposed to any disconfirming evidence in the form of hard-working, dedicated, competent civil servants. While this problem is less severe on the civilian side, it does exist. Even though most civilians are indirectly exposed ro military personnel early in their careers, it is not until they reach mid or upper management that they generally work closely with military personnel.

A fourth factor is that there is very little systematic knowledge or education given each group about the other. This fact is particularly serious with respect to lack of military knowledge of the civilian personnel administration system, especially the civil service rules and regulations. While such knowledge may increase understanding and general acceptance of civilians and their system by the military, there is a far more important reason to impart this knowledge. Many

of these military have direct line management responsibility for civilians and execute civilian personnel policy for their commands. It is virtually impossible to perform these functions without a working knowledge of the civilian personnel system.

There are a variety of ways of dealing with the civilian-military relationship problem. One way is through imparting knowledge to each group about the other. The Navy has taken one step in this direction in its course for Prospective Commanding Officers and Executive Officers of shore stations, which includes material on the civilian personnel system. Another solution is to modify Navy officer career patterns to provide for special development of officers who will ultimately command shore stations. Kay has argued for such a change because of his strong feeling that experience or even command at sea is insufficient to prepare one for command ashore.[8] He suggests that at the career midpoint, preferably upon completion of command at sea as a commander, officers who so request would be diverted into the field of Shore Establishment management. These officers would be offered training in labor relations, financial management, budget planning, nonappropriated fund administration, civilian personnel management, and public relations.

While increased training and mutual knowledge will certainly help, the first basic step is to confront openly the problem as it presently exists. This requires getting past the stage of anecdotal information to a systematic qualitative and quantitative description of the problem and its effect on military organizations. The information in the study described here is one step in that direction. We found a wide variation in the quality of relationships, many contributing factors, and dysfunctional consequences where the relationship was poor. Additional information collected during this study and during research projects in field units of the Shore Establishment suggests much more serious problems exist below the executive level. The military-civilian relationship is an interesting and complex institutional problem awaiting institutional attention.

## BIOGRAPHIC SUMMARY

Laurie A. Broedling was educated at Brown and George Washington Universities, earning the Ph.D. degree in organizational psychology from the latter. She is a Supervisory Research Psychologist at the Navy Personnel Research and Development Center, San Diego, and is conducting research on work motivation, productivity, organizational effectiveness, and management techniques in the Navy. Dr. Broedling has published several articles in the area of her research.

## BIOGRAPHIC SUMMARY

Alan W. Lau received the Ph.D. degree in applied psychology from the University of Utah. He is a personnel research psychologist at the Navy Personnel Research and Development Center, San Diego. His research is centered on job redesign, leadership effectiveness, organizational behavior, and personnel selection and measurement. Dr Lau is the author of several journal articles.

## BIOGRAPHIC SUMMARY

Arthur R. Newman was educated at Harvey Mudd College and San Diego State University. He is an operations researcher at the Navy Personnel Research and Development Center, San Diego. His research interests include incentive award systems, work motivation, productivity, and organizational behavior and he has co-written several articles and technical reports in these areas.

## NOTES

1. Anthony L. Wermuth, "Civil-military Relations in the Department of Defense: Perspectives, Perceptions, and Proposals," *The Bureaucracy*, Spring 1980, pp. 26-34; M.J. Korbol, *Praise, Punishment and Promotion: A Handbook of AF Civilian Employees for the AF Military Manager*, 1315-78 (Maxwell Air Force Base, Ala.: Air Command and Staff College, May 1978); John J. Baker, *A Study of Comparative Research on Organizational and Behavioral Factors Affecting the Integrated Military-Civil Service Workforce*, AD-B040 811L (Maxwell Air Force Base, Ala.: Air Command and Staff College, May 1977).

2. J.F. Landolt, Jr., *The Air Force Civilian and Military Personnel Systems—A Synopsis of Their Similarities and Differences*, 1410-78 (Maxwell Air Force Base, Ala.: Air Command and Staff College, May 1978).

3. There are also differences between the Navy, Army, and the Air Force that are at least partially a function of structure. For example, the Navy has almost twice as many civilian executives as do the Army and Air Force. One reason is that the Navy has a large, in-house R&D capability, and most of the top R&D management structure is civiliao.

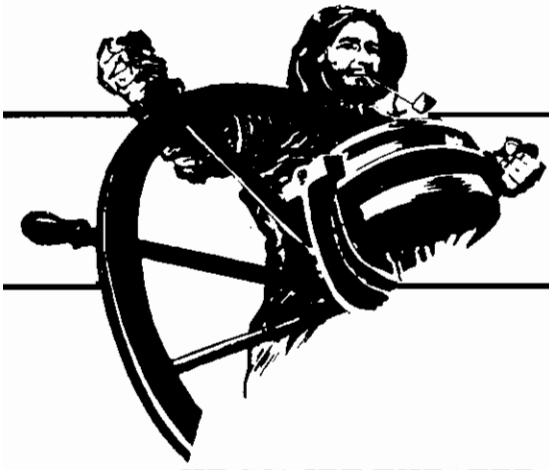
4. Alan W. Lau, et al., *The Nature of the Navy Civilian Executive Job: Behavior and Development*, NPRDC TR 79-27 (San Diego: Navy Personnel Research and Development Center, July 1979). Also summarized in Laurie A. Broedling and Alan W. Lau, *Executive Summary: Navy Civilian Executive Study*, SR 79-10 (San Diego: Navy Personnel Research and Development Center, January 1979).

5. With respect to the structured questionnaires, one version was sent to the full population of career civilian executives and a second, shorter, version was sent to all military executives who supervise civilian executives or make policy in their regard. The return rates for the questionnaires were 58 percent for the civilian sample and 67 percent for the military sample.

6. W.H. Githens and Richard S. Elster, "Comparison of Navy Officer and Civilian Performance Evaluations," *Proceedings, Psychology in the Department of Defense, Sixth Symposium*, April 1978, pp. 265-266.

7. While the study's information was collected prior to the official institution of these major changes in the civilian personnel system, the proposed changes were being discussed and debated during the time of the study. Consequently, the authors received a great deal of information relating to these changes.

8. Howard N. Kay, "Managing the Shore Establishment," U.S. Naval Institute *Proceedings*, December 1977, pp. 19-25.



# SET AND DRIFT

## THE SOVIET THEATER COMMAND: AN UPDATE

by

**Gregory C. Baird***

**Introduction.** Since my article was originally published in this journal in 1980, additional information has become available which supports my conclusion that the theater command, the High Command, may be reinstituted within the Soviet strategic command and control structure.[1] This research note presents this new evidence and briefly discusses some of the implications of the emerging Soviet strategic command and control structure.

**1979—The Year of Change.** 1979 was a tumultuous year for the Soviet command in the Far East.[2] Early in the year, Army Gen. G.I. Salmanov and Col. Gen. B.V. Snetkov assumed the commands of the Transbaykal and Far East Military Districts, respectively. This shakeup left Army Gen. I.M. Tretyak, commander of the Far East MD, as the "veteran" MD commander in the Far East. These new appointments were first identified by Western observers in February and March 1979 and suggested more than normal replacement of commanders, following as they did Brezhnev and Ustinov's March 1978 grand tour of the Far East.

While these events were interesting, events further westward were even more so. On 29 December 1978, *Pravda* reported that on the previous day Brezhnev had received Army Gen. V.I. Petrov and Col. Gen. G.I. Salmanov and congratulated them on their new appointments.[3] As subsequent events revealed, Salmanov was appointed as commander of the Transbaykal MD and received a promotion. But Petrov's appointment from his previous position of Deputy Commander in Chief of Ground Forces remained unannounced. In fact, beyond his election as a deputy to the Supreme Soviet, announced in *Red Star* in April 1979, the Soviet press remained silent of Petrov or his activities until December 1980.

Clearly the Soviet silence regarding Petrov and his appointment was intentional. No less clear is the fact that the lack of press coverage did not indicate any falling from grace on Petrov's part. Being personally congratulated by Brezhnev is not the mark of a man on the way out. Moreover, Brezhnev's

*Mr. Baird is a military operations analyst with Pacific-Sierra Research Corporation.

personal involvement indicated that Petrov's appointment was to a position of some consequence. Hence, why the absence of press coverage concerning the current activities and position of a former Deputy Commander in Chief of Ground Forces? Curious indeed!

Fortunately, non-Soviet sources provide illumination on Petrov's activities. Following *Beijing Review*'s disclosure that the Soviets had established a new Soviet command in the Far East in 1979, an article in *Issues & Studies*, a Taiwanese journal, provided additional details.[4] Citing an unconfirmed February 1979 report, the article noted that the Soviets had established an "Eastern Joint Command." The command reportedly had control over the forces of the Siberia, Transbaykal and Far East MDs. Further, the article stated that Petrov "will be" the Commander in Chief.

By itself this report could easily be dismissed. However, months later, the authenticity of this report gained additional weight. In August 1980, the Kyodo News Agency reported that the Japanese Government had "disclosed" the establishment of a command with authority over the Siberia, Transbaykal and Far East MDs. It also identified Petrov as the commander of the "joint headquarters."[5] However, shortly afterward Petrov was reassigned. By the end of December 1980, Petrov was back at the Ministry of Defense occupying the position of Commander in Chief of Ground Forces.[6]

Had Petrov's theater command be disbanded or had he been replaced? Fortunately, the Soviets were less secretive after Petrov's return to Moscow. In December 1980, there was a major conference of the Far East Military District Party organization which was addressed by Marshal Ogarkov, Chief of the General Sraff. *Red Star*'s reporting of the conference included a list of attendees. This list was headed by Army Gen. Valdimir L. Govorov, last reported as Commander of the Moscow Military District, with Admiral Spiridonov, Commander of the Pacific Fleet, second.[7] Notably, Govorov's position was not given, in contrast to all the others on the list. However, his ranking ahead of Admiral Spiridonov signaled that Govorov held an extremely high position in the Far East.

This early indication that Govorov had replaced Petrov as CINC was subsequently confirmed by press coverage of the 60th anniversary of the Mongolian People's Army in March 1981. The Soviets sent a ranking delegation headed, interestingly enough, by Petrov. According to a Montasame dispatch, among the Soviet delegation was Govorov, identified as "commander-in-chief of the Soviet Far Eastern troops."[8] This title belongs, as it did in 1945, to the CINC of the High Command. Without question, then, the Soviets have established a High Command of Forces in the Far East, currently commanded by Govorov.

A major reorganization of the command and control structure of Soviet forces facing the Manchurian area of the People's Republic of China has, thus, occurred. In 1979, the Soviet military command in the Far East saw the replacement of two MD commanders, the establishment of a High Command and two CINCs of Forces in quick succession. The Soviets appear to have concluded that their decades-old, highly centralized command and control system was inappropriate to the requirements of contemporary warfare, particularly warfare that probably will involve two fronts. To remedy this difficulty, the Soviets have returned to the structure that worked so well for them during the Manchurian Operation of 1945.

**Implications.** The peacetime establishment of a High Command is not without precedent. The Soviets reestablished it in the Far East during the

period 1947-1953. Then it was initially established almost certainly due to the unrest caused by the culminating Chinese revolution. The Korean conflict caused its retention. However, the significance of the establishment of a High Command in this decade should not be lightly dismissed.

The reshuffling of military district commanders and the establishment of the High Command followed too closely Brezhnev and Ustinov's visit to the Far East to be completely unrelated. While what Brezhnev saw and was told during that visit remain unknown, it was probably impressed upon him that serious deficiencies existed in Soviet capabilities—materially and qualitatively. The materiel buildup since his visit is well known; the addition of the *Backfire*, the *Minsk*, the *Petrovsk* and the *Ivan Rogov* are only the most spectacular. However, as the above make clear, Soviet efforts to redress perceived deficiencies also included the more qualitative aspect of command and control. Beyond the significant strengthening of Soviet materiel capabilities in the Far East, they have created the command and control structure to wield these capabilities theater-wide.

Thus the most obvious result of the reorganization in the Far East is the unification of the capabilities of three military districts. The High Command provides the requisite direction to enable the flexible and coordinated operations of the forces of these military districts against the PRC, Japanese and U.S. forces, as required. In this respect, the establishment of a modern High Command of Forces in the Far East TVD puts Soviet forces there closer to an operational war footing than they have been since 1953.[9]

Moreover, if the Japanese report is entirely correct, the High Command has been granted extraordinary authority. The Japanese report alludes to the fact that the High Command also controls the Far East-deployed *Backfires* and SS-20s. The subordination of strategic strike assets to a theater authority could have far-reaching consequences, particularly if duplicated in other theaters of military operations.

The devolution of control of selected strategic strike forces to theater authorities would greatly simplify the command and control problems faced by Moscow in a future conflict. While the decision to actually employ these forces would doubtless be retained by Moscow, theater authorities probably have responsibility for planning for and controlling employment. In essence, a dedicated theater strike force is created, removing the necessity and difficulty of operational-strategic force allocation decisions during hostilities. Moscow, consequently, could concentrate on control of intercontinental strategic forces and allocation of strategic reserves to the individual TVDs.

## NOTES

1. See "*Glavnoe Komandovanie*: The Soviet Theater Command," *Naval War College Review*, May-June 1980, pp. 40-48.

2. Indeed, 1979 began an extremely tumultuous period for most MD and Group of Forces (GOF) commands. A major reshuffling of MD and GOF commanders took place between 1979 and 1981 involving 10 MDs and all GOFs except the Northern Group of Forces. See National Foreign Assessment Center, *Directory of Soviet Officials: National Organizations*, CR 81-11343, May 1981.

3. The author is indebted to Mr. Notre Trulock of the BDM Corporation for this information.

4. Yin Ch'ing-yao, "The Peiping-Moscow Relationship and Its Impact on Northeast Asia," *Issues & Studies*, March 1980, pp. 28-45.

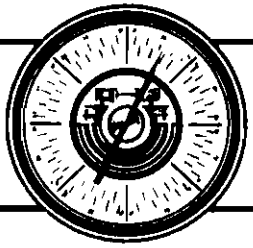
5. See FBIS, *Daily Report: People's Republic of China*- 13 August 1980, p. C1.

6. See *Directory of Soviet Officials*.

7. V. Shuravlev, "Set the Example—Lead," *Krasnaya Zvezda*, 27 December 1980, trans. JPRS 77515, *USSR Report: Military Affairs*, 5 March 1981, p. 4. It was probably returning from this conference that Admiral Spiridonov met his death.

8. See FBIS, *Daily Report: Asia and Pacific*, 25 March 1981, p. F2. The author is indebted to Mr. Phillip A. Petersen of the Defense Intelligence Agency for this reference.

9. This fact has not escaped the Chinese. They recently cited the "establishment of the *war zone command headquarters*( emphasis added)" as, among other Soviet actions, constituting a "military threat to China." See Li Huichuan, "The Crux of the Sino-Soviet Boundary Question," *Beijing Review*, 3 August 1981, p. 15.



# THE BAROMETER

### Get the War College Back in the Navy

Sir:

The composition and organization of the Naval War College faculty and staff shown by your listing in the September-October 1981 issue are frightening! Two of the three War College departments are headed by civilians, the "Advisors" do not include a naval officer and your "Board of Advisors" includes only one naval officer.

The operative words in the name of your institution are "naval" and "war." Haven't you forgotten this in taking on the trappings of academia? Why all rhe emphasis on degrees, civilian professors and academic titles? For example, why list Frank M. Snyder as Professor when ro mosr of us in the military the facts that he is Captain Frank M. Snyder, USN (Ret.) and is an experienced communicator are much more telling qualifications for someone on your faculty.

Isn't the Naval War College supposed to be developing men who in peacetime have the wisdom and moral courage to develop and create a Navy which can accomplish its missions and who in wartime, have the presence of mind and physical courage to lead it to victory in combat? Look at the weakened stare of today's Navy. When have Naval War College graduates spoken out to prevent it? Where are they speaking out today to reverse it?

Let us get the Naval War College back in the Navy. Let us recreate the challenging pre World War II environment which helped develop the Kings, Nimitzes and Spruances.

Cdr. Paul H. Backus, USN (Ret.)

Sir:

In his very interesting letter, Paul H. Backus, Commander, USN (Ret.), has asked a valid and timely question. This is, indeed, a good time to debate and to reconsider rhe missions of the Naval War College, to ask what it is that the Navy needs most and should most endeavor to obtain from senior service education. The men who go down to the sea in ships are too few; those who conduct the Navy's affairs ashore in many cases do so at 71% manning—all

this on the verge of one of the biggest increases in capital expenditures in the Navy's history.

What the Navy needs from its War College cannot be supplied wholly by those in uniform. The War College does not need the trappings of academia nearly as much as the substance. The Frank Snyders of the faculty are important not only for specific technical experience and expertise but for a grasp of the way in which grand tactics—and grand tactical theory—bridge the gap between strategy and operations. Wisdom and moral courage can be learned but not taught; and in any case, they are rarely the product of adult education of any sort. One must ask as well about the likely results of re-creating—if that were even possible—a pre-World War II environment, for we no longer inhabit a pre-World War II world.

The ability of the Navy to contribute to national well-being depends, to a great extent, on the ability of the Navy's senior officers to link naval missions and doctrine with national-level political and strategic thinking on national interests, intentions, and force development. Senior service education is the key to this and, for the Navy, a strengthened War College seems a simple necessity for the 1980s—to educate the Navy's future leaders; to help shape the Navy of the future by contributing to the long-range thinking and planning that always gets overwhelmed by the immediate in Washington; and by improving the Navy's combined arms and joint service doctrine, planning, coordination, and operations. The Naval War College has never left the Navy, but in doing these things well it could do much to make the Navy and its leaders more effectual in the 1980s.

Thomas H. Etzold
Director of Strategic Research
Center for Naval Warfare Studies
Naval War College

*Editor's Note:* The President of the Naval War College is a naval officer. So are many members of the faculty. Because of the additional knowledge and breadth of thought they provide, officers from other Services are appointed as advisors. For the same reasons scholars, lawyers, and people in business are appointed to the Board of Advisors. Without them all the War College would be no more naval than it is. What it would be is poorer than it is.

### MacArthur, the Navy, and the Orange Plan

Sir:

I enjoyed your article on the Orange Plan [see the *Review*, Jul-Aug 1980, pp. 23-41] very much. I had the plan in my keeping for two weeks before the war began. I was a Second Lieutenant then. It wasn't every Second Lieutenant, First Lieutenant, Captain, Major or Lieutenant Colonel that even saw it.

General MacArthur had not had anything to do with the formation of the plan, so he decided that he would make a plan of his own. He had Colonel Daugherty, Artillery Brigade Commander; Colonel Pierce, 26th Cavalry Commander; Colonel Horan, Baguio Commander; and the Commander of Ft. McKinley coming into Manila every Wednesday to form a new plan.

The Orange Plan was very complete. It even gave the amount of dynamite to use on bridges.

But MacArthur threw it out. This resulted in Philippine scout units being anywhere except where they were supposed to be. "E" Battery, 24th Field Artillery, would have been on Batangas Bay, but they were on the west coast of Bataan.

The brunt of the attack fell on Philippine army troops who were green troops. They had six weeks' training before the war began.

It seems the Navy had the Japanese attack figured out long before it took place.

Colonel Daugherty was the best informed officer in the Philippines. It was his fourth tour of dury there. He had stated in July that the Japanese would attack at the end of the rainy season and that was December. He was right.

Why the Army and MacArthur didn't listen to the Navy I don't know.

Lt. Col. George A. Reed, AUS (Ret.)

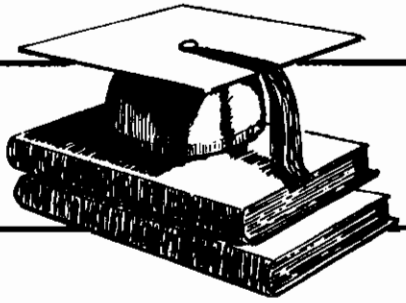
### Israel and American Base Privileges

Sir:

In his article, "Clientism Unbound: America and the Tactics of Third World Security," [see the *Review*, May-June 1981, pp. 75-82] Ensign Robert King Morris wrote that "Our Arab contacts frequently question the fairness of our special relationship with Israel, although they refuse us the same naval air cover and privileges at bases with which the Israelis repay us."

If the above statement is true, what specifically are rhe naval air cover and base privileges we enjoy in Israel? Where does the United States post AWACS in the Middle East? Where did the United States recently hold air maneuvers and from what air bases? What is the military relationship between the United Srates and the Government of Oman?

Charles M. Shannon, Jr.
Gloucester, Va.



# PROFESSIONAL READING

## REVIEW ARTICLE
## THE UNITED STATES, GREAT BRITAIN, AND THE COLD WAR 1944-1947*

by

**Richard A. Best, Jr.#**

In discussing the cold wat, which set in almost as soon as the guns of Wotld War II wete stilled, histotians have tended to focus almost exclusively on the incipient rivalry of a democratic, capitalist America and a communist Russia. Although the origins of the superpower relationship of today have been the subject of numerous treatises and spirited controversy, most writers have failed to acknowledge sufficienrly the major role played by Great Britain in world politics during the years immediately after the end of World War II. Even in the midst of the struggle against Germany, British leaders had seen the dangers of expansive Soviet influence and soon began to develop policies to counter Moscow's ambitions; this was at a time when Americans—including principal government officials—still believed that the end of hostilities would inaugurate a peaceful world based on an effective United Nations.

British pessimism regarding the likely nature of the posrwar world may have been realistic, but as the war ended British capabilities were being rapidly undermined by a host of domestic, imperial and foreign difficulties. That eventually the United States came to share British assumptions and align both its policies and its vast resources with those of the United Kingdom is one of the unheralded triumphs of British foreign policy.

The chief merit of Terry Anderson's recently published work, *The United States, Great Britain, and the Cold War 1944-1947*, is its patient examination of the recently opened documentary records of the years when the United States finally foreswore its isolationist proclivities and accepted global engagement as permanenr policy. The period 1944-1947 was a crucial rime of transition and the close artention Anderson devotes to this topic is long overdue. Although his is a large and complicated story and many of its aspects require further investigation, Anderson nevertheless documents the major stages in the evolving relationship.

In 1944 President Roosevelt seemed to be convinced that he could play the "honest broker" between Churchill and

*Authored by Terry H. Anderson. Columbia, Mo.: University of Missouri Press, 1981. 256pp.

#Graduate Fellow, Georgetown University.

Stalin and at the same time avoid postwar entanglements in Europe. He had, after all, the Pacific War to consider as well as the unwillingness of the American populace to envision a permanent U.S. presence in Europe. However, after witnessing continued Soviet intransigence over Poland and related topics. FDR began to work more closely with the British after the Yalta Conference, at least on Central European issues. Anderson suggests that this policy was carried forth by President Truman after Roosevelt died in April 1945, but only for the first month or so of his administration. The new President, receiving divergent counsel from FDR's various advisers, soon shifted towards a more cautious and independent line that was reflected in Harry Hopkins' trip to Moscow and in Truman's efforts at the Potsdam Conference to keep his distance from the British and mediate a compromise peace. The British leaders, the new Labor Government as much as Churchill and Eden, well knew that U.S. support for their policies was essential and that they could not maintain the European balance of power alone. Despite Truman's reservations and hostility in some American quarters, the British did have some major assets. There was vast good feeling for the ally who had fought so long and hard and who shared many American values; furthermore, habits of close military and diplomatic collaboration had developed during the war. The problem for London was how to continue the relationship into the postwar world when the overarching goal of defeating Nazi Germany no longer existed.

Anderson makes a particularly useful contribution by highlighting British efforts to make their concerns known not only to U.S. policymakers but also to the American public. The British "undertook a virtual propaganda campaign in the United States" (p. 32); embassy officials traveled throughout the United States to explain British views and to attempt to influence American policy. As one Whitehall official perceptively observed, "sooner or later American opinion and foreign policy prove to be the same thing. If we are to bring Administration policy with us, we must bring majority opinion with us as well." (p. 33) Foreign Minister Bevin's firm line at the United Nations in early 1946, as well as former Prime Minister Churchill's "Iron Curtain" speech in March, provided the American public with vivid examples of resolute leadership at a time when the Truman administration appeared to be confused and vacillating.

Anderson sees the year 1946 as the crucial turning point in East-West relations. Changing American perceptions about the postwar world evolved into more assertive policies. Concern over Russian pressure on Turkey led to the dispatch of the U.S.S. *Missouri* to the eastern Mediterranean—a milestone towards the eventual creation of the 6th Fleet. At the Council of Foreign Ministers meeting in Paris in April 1946, the United States announced its willingness to guarantee a disarmed Germany for 25 years—a major shift from previous U.S. intentions to withdraw from European commitments. Difficulties with the Soviets over Iran persisted and, as the year progressed, U.S. leaders became disturbed about the possible victory of a communist insurgency in Greece.

Anderson touches briefly on the beginnings of peacetime U.S.-U.K. and Canadian military cooperation which emerged from the wartime Combined Chiefs of Staff organization and the U.S.-Canada Permanent Joint Board on Defense. These ties would eventually lead to the establishment of integrated military planning within the North Atlantic Treaty Organization. Anderson's discussion of the relationship of military planning to diplomacy is well done especially in view of the banal treatment of this problem by some historians.

Throughout 1946 Britain's economic difficulties became more serious. A $3.75 billion American loan did not suffice to restore the U.K. economy. The moment of truth arrived in early 1947 when it became obvious that support of the anticommunist Greek Government had become an impossible burden. The British well appreciated how a victory by communist insurgents would endanger the Western position in the eastern Mediterranean but were powerless to do more. However, American policymakers had come to share these concerns about Greece, in large measure as a result of careful British coaching. The United States officially and publicly took over Britain's role in aiding the Greek Government and in supporting "free peoples who are resisting attempted subjugation" as proclaimed by the President in announcing the Truman Doctrine in March 1947. Both the Congress and the American public were by now in a mood to support the President, and from the commitment to Greece would flow the policies by which the United States would eventually become the leader of a Western alliance and maintain military forces on a global scale.

Anderson does not argue that the United States was gulled into globalism by crafty British diplomacy. The American assessment of Soviet intentions was the key factor: "Washington officials finally accepted London's evaluation because it seemed accurate—Soviet behavior was incompatible with the aims of the West." (p. 180) Nonetheless Anderson demonstrates that British influence was a decisive factor. The evidence Anderson presents suggests that if the British had not been determined to resist Moscow's efforts to expand its influence in 1945-1947, the cold war would have occurred on rather different terrain—indeed, it might have seen a Soviet Union, dominating a subservient Europe, versus a hostile but isolated America. There can he little question that British diplomacy made a big difference and that only with Anderson's cogent study has it begun to be systematically analyzed by historians.

**EDITOR'S NOTE: In our review of Geoffrey Best's *Humanity in Warfare* that appeared in our September-October issue, the first full paragraph on page 123 stated that Best writes in a controversial style. The word "controversial" should have read "conversational."**

## BOOK REVIEWS

Cannizzo, Cindy ed. *The Gun Merchants: Politics and Policies of the Major Arms Suppliers*, New York: Pergamon Ptess, 1980. 211pp.

*The Gun Merchants* is a collection of eight essays on the international atms trade. The contributors are political scientists from the academic world. In fact the volume is an outgrowth of a meeting of the Midwestern Political Science Association in 1978. The heart of the book consists of five chapters, each on a major arms exporter: United States, U.S.S.R., Great Britain, West Germany, and France. The editor has contributed an opening background essay and the closing essay on prospects for control of arms transfers. The one other paper included outlines a taxonomy of international arms control proposals. There is a very substantial and useful bibliography at the end of the book as well as lists of references at the end of each of the chapters. The overlap between references and bibliography is limited.

The authors, particularly the editor, have a definite point of view regarding arms transfers—namely, that transfers are a bad thing, and that more control, although difficult to achieve, is a good thing. This is, of course, an outlook which not all observers share. It is because such transfers provide economic and political benefits to both exporters and recipients that they continue to take place. Most people would surely only agree that they would prefer that transfers of arms to their enemies be controlled. However, a reader who does not share the view that international arms control is a good thing can still learn much from the book regarding policy and policy history in the five exporting countries.

The concept behind this collection is very good. There are important differences underlying the policies of major exporters which certainly warrant separate treatment. To note the most obvious: in France, where more than 40 percent of arms produced are exported, policy is driven by different considerations than it is in the United States.

While I found the idea to be a good one, I was somewhat disappointed with the resulting book with the exception of the first essay. The editor's opening paper is an excellent overview of the topic. In it she briefly surveys the 20th-century history of arms transfers, then deals in some detail with the present period, noting such important developments as the trend toward licensing and coproduction and the expansion in the number of exporters to include Third World suppliers. The specific country chapters diverge greatly in approach. Tracing common threads among them is difficult. As a beginning, it would have been helpful to bring together statistical information for the five countries. The U.S. chapter, which concerns the Carter administration commitment to limitations on transfers, seems very much out of date although the author notes that, "Arms transfers are too popular and useful a policy tool to be abandoned: only a redefinition of the American foreign policy interests they serve would foster fundamental change." (p. 45) In other words, despite the Carter administration rhetoric, perhaps policy was in fact not too different from that of previous administrations, and perhaps it was not very different from Reagan administration policy. The chapter on France, written long prior to the Mitterand government, soon may seem out of date also. This is particularly true in light of the author's point that while economic factors are important, French arms transfer policy above all responds to concerns of general politics. The Soviet chapter has a narrow focus—arms policy toward sub-Saharan Africa. While much of what is said regarding,

for example, factors influencing Soviet behavior, is applicable in a wider context, the purposes of the book would have been better served by an essay on Soviet arms policy in general.

The chapter on Germany is perhaps the most interesting of the country-specific chapters because there is so little literature on German arms transfer policy. The author emphasizes the deliberately low profile of German policy, but concludes that given the emergence of a significant defense industrial base, and NATO emphasis on standardization and interoperability, Germany is increasingly subject to "the same political, economic, technical and security pressures that other Western arms suppliers have had to accommodate in the last fifteen years." (p. 125)

In the final chapter the editor distinguishes among reduction, restraint, and regulation of arms transfers. Reduction, meaning significant reductions in numbers of weapons and/or dollar volume transferred, and restraint, meaning gradual reduction and/or certain qualitative or geographical constraints, are regarded by the author as impossible given the present international context. Regulation, which she defines as administrative control, accepting the status quo and seeking to "regularize, rationalize, and bureaucratize the process multilaterally" is viewed as the least controversial of the three approaches, but its prospects are also seen as dim. Further, "Even if these . . . regulations could be negotiated into a supplier's agreement, the viper's pit at the arms bazaar would not be turned into a nest of garter snakes." (p. 195) In short, the editor views prospects for control pessimistically.

Although somewhat dated, *The Gun Merchants* is a useful contribution to arms transfer literature. It provides some interesting insights into individual country arms transfer policies. Written by, and mostly for, professional political scientists, it is not recommended for the casual reader but is of most benefit to readers having considerable familiarity with the arms control literature.

PROFESSOR J. ERIC FREDLAND
U.S. Naval Academy

Exum, Wallace Louis. *Battleship: Pearl Harbor, 1941*. Virginia Beach, Va.: The Donning Company, 1981. 136pp.

Want a firsthand look at the "old" Navy of fancy work, wooden decks, slush funds, foo foo juice, Academy martinets, mail call, bosun pipes, black oil, seabags, pogey bait, shining brass, and 14-inch guns? Then *Battleship* may be the book for you. As an unvarnished view from the deckplates of the routine and tradition of seagoing life, the book is tough to match. First published in 1974, colorful and spare and not too serious, the story portrays no dashing, larger-than-life heroes or leaders of classic dimension, but rather focuses on the quite ordinary bluejackets assigned to the battleship *Nevada*. In this respect, the book is unusual. Most people who have been associated with the Navy past or present will appreciate this somewhat sentimental voyage and will feel some emotional kinship with the story's central, very human characters. Fast-moving and straightforward, *Battleship* could have been written only by someone who was there.

The actual events of 7 December 1941 take only a few pages and are entwined in a very believable fictional framework that begins when Quartermaster Chief Toland reports for duty aboard *Nevada* the month before. With much of the action set in the familiar surroundings of CPO Quarters, the Wheelhouse, and the Charr Room, the story unfolds easily from Toland's steady, experienced, no-nonsense perspective. Within the clipped, entertaining and very realistic dialogue, the author makes two points that are as sobering today as they were 40 years

ago: first, our overconfidence in knowing and assessing the enemy's intentions and second, the utility of ships as large, expensive, and vulnerable as battleships. In this respect, the book is unquestionably current. While the serious thread that runs through the story does not dominate it, the author's points are well-founded even if somewhat simplistically presented. Included at the book's end is an afterword that continues a brief history of the battleships that survived the Japanese attack, plus a well-known letter written by Nimitz in 1965 that addresses the totally devastating effect that the attack would have had *if* the fleet had been at sea and *if* Yamamoto had followed up the tactical advantage gained on the initial attack.

Whether the decision to republish was made following the announcement of the battleships' return to service or not is uncertain. However, casual historians, ex-Navy men (and women), and prospective *New Jersey* crewmembers will certainly find this novel's brief excursion into the past a worthwhile experience.

J.P. MORSE
Lieutenant Commander, U.S. Navy

Fallows, James. *National Defense*. New York: Random House, 1981. 221pp.

This book is a readable discussion of selected national defense issues. Fallows is writing for the general reader rather than for military affairs professionals. Unfortunately, his readers will receive an unbalanced and frequently biased picture of national defense.

Fallows is a journalist, not a military analyst. He notes his background in the Introduction and discloses that he has had no military service. Although Fallows says that he has been conscious of possible bias and has done his best to avoid it, this reviewer believes that he has been unsuccessful in the attempt.

A major problem with *National Defense* is the lack of balance in its treatment of topics. Fallows draws his arguments primarily from dissidents and critics of the current defense establishment and rarely gives the other side of an argument. For example, 15 pages are devoted to a stimulating, essentially sociological examination of "the civilianized service" of the volunteer army and the various problems that it has created for the armed services. But Fallows gives only one page, and that includes his rebuttal, to what he considers the "three respectable arguments against the draft." Although he uses a variety of military and academic sources to show the pernicious effects that the volunteer army has had, no real attempt is made to examine the social costs of a peacetime draft. He does not let proponents of a volunteer army develop their case and accuses economists who favor relying on market forces to obtain military personnel of making "wooden pronouncements." (Fallows appears to be weak in his understanding of economics, and he is opposed to applying economic analysis to national defense decisions.)

While Fallows quotes liberally from interviews with critics of various aspects of contemporary national defense and from a variety of publications (mostly secondary sources) to make his points, he often quotes anonymous officers and civilian defense experts. Some of these critics of the way national defense is conducted are respected, serious analysts like Pierre Sprey and Stephen Canby. But Fallows also makes heavy use of "authorities" such as the pseudonymous "Cincinnatus." Use of such material does not inspire reader confidence in the objectivity of the author.

Fallows makes some unsubstantiated accusations that are very offensive. In discussing military careerism, he states,

"Most of today's generals and admirals are men who got there because they were procurement wizards, or adept at punching their tickets, or careful not to make waves. Simply on a human level, I was struck by how little 'edge' most of the generals seemed to have to their characters, how bland most of them seemed . . . . " (p. 122) There is no place for such *ad hominem* argument in a work that purports to be a serious study of national defense.

It is regrettable that Fallows' book is so flawed. He does highlight some important issues that must be faced in national defense policy. The quality and effectiveness of the people in the armed forces, as well as their numbers, is a vital concern. There are dangers in developing highly complex weapons systems which cost so much that too few units are procured. If weapons are very expensive to operate, training opportunities can be so constrained by Operating and Maintenance funding that readiness suffers. The fortunate absence of any actual experience with thermonuclear war makes the planning and programming decisions for strategic nuclear forces uniquely full of uncertainty.

Fallows is certainly correct in arguing that the public discussion of national defense needs more coherence, and *National Defense* contains much interesting material pertinent to these national concerns. But the work's omissions and errors prevent it from being an effective means to that end.

JOHN A. WALGREEN
Wheaton College

Gann, Lewis H. and Duignan, Peter. *Why South Africa Will Survive: A Historical Analysis*. New York: St. Martin's Press, 1981. 312pp.

In their preface to *Why South Africa Will Survive*, Drs. Gann and Duignan assert that their " . . . views concerning South Africa are unpopular within the academic establishment . . . " (p. [xi]), which, in this reviewer's judgment, somewhat overstates the case. Academia is hardly a monolithic entity and, just as survey research has shown that ROTC units are perceived differently by different faculty, depending upon academic discipline, age, sex and previous military service, so one could contend that academics have different perceptions of South Africa. Perhaps their statement might by modified to read black and liberal white American academics, the overwhelming majority of whom seem to view South Africa in a hostile manner. Those familiar with the facile remarks about the "military mind" will readily grasp the point about the hetrogeneity of university and college faculties in the United States.

The authors, who have done extensive research in and on Zimbabwe and who are well known for their excellent joint volumes on the colonial services of Germany, Great Britain and Belgium, are historians by training (Gann received his doctorate at Oxford, while Duignan received his at Stanford) and both have had active military duty in the American (Duignan) and British (Gann) armies. From their vantage point in the prestigious Hoover Institution in Stanford, California, the two historians have become disenchanted with the orthodoxies propounded about South Africa by liberal academicians, and their book is a brilliantly conceived and executed counterattack. They are both accurate and fair in recapitulating the bulk of the liberal's position on South Africa, but their recapitulation suffers somewhat from their omission of the names of most of the liberal sinners. Interestingly enough, two of the six persons who read the book in manuscript form and who are thanked in the preface can be so classified. Generally speaking, one needs to hunt among the endnotes to find the villains, as they are not often displayed in the text.

This book is organized in a manner designed to interest the novice as well as the expert Africanist, and the authors have written a lucid, crisp history of South Africa both in terms of population groups and in terms of institutions and policies. The greatest single strength of the book is the spectacular comparative sweep of the exercise which lifts South Africa out of the *sui generis* category it has often been forced into and places it within the context of the 18th, 19th and 20th-century phenomena throughout the globe. It is this comparative skill that reinforces their underlying premise that far too many American academics, especially the Africanists, have been willing to isolate South Africa in their minds and feelings and to judge it by standards not applicable either to other nations (usually those whose diplomats and citizens are vehement critics) or to the same time period in history, with the end result that South Africa is subjected to a double moral standard (see p. 258). Fortunately, a number of Africanists are sufficiently well balanced emotionally and politically to subject all the states of the African continent to the same moral yardstick.

Another attractive feature is that the authors provide a discerning analysis of the assets and liabilities of South Africa's Military Establishment and take a hard, sober look at the various types of threats and insurgencies that the police and defense units will most probably face. Their estimate, on balance, is favorable to the current regime (chapters 6, 7, and 10), and they are equally willing to draw attention to a number of the repugnant features of the apartheid system (see p. 300). They are rather critical of the high degree of state intervention in the South African economy and come out in favor of a stronger free market system in South Africa (pp. 296-297), along with a system of fragmenting power known as consociationalism (generally linked with sharp linguistic, ethnic and religious cleavages in the population of some of the nations of Western Europe, such as the Netherlands and Switzerland and Austria) as a counter to straight one-man, one-vote African majority rule (pp. 299-300). The tables of the book are excellent and the maps are adequate, but neither the indexing nor the endnotes are detailed enough to recommend the book as a reference work. A second edition, available in paperback at much lower cost and more rigorously footnoted, would certainly be most welcome and would facilitate the serious debate between the liberals and the moderate conservatives that both authors have carefully tried to foster.

RICHARD DALE
Southern Illinois University at Carbondale

Hollick, Ann L. *U.S. Foreign Policy and the Law of the Sea.* Princeton, N.J.: Princeton University Press, 1981. 496pp.

During the past decade, Dr. Hollick has emerged as the best-known and most widely published specialist on the formulation of U.S. ocean policy. Her important new book, *U.S. Foreign Policy and the Law of the Sea*, is rooted in her many articles describing the bureaucratic in-fighting among such actors as the White House, the Congress, the Departments of State, Defense, Interior, Justice, Commerce and Transportation, the National Security Council, the Central Intelligence Agency and the Permanent Mission of the United States to the United Nations. Dr. Hollick's book, like her earlier articles, has the great merit of explaining plainly and intelligently what went on in the tangle of Washington politics to result in those ocean policies with which Washington then negotiated in international politics.

Dr. Hollick's book, however, goes well beyond her articles in at least two ways. First, the book is much more

comprehensive. It weaves together many of the bits known about the ocean policy process and fills in many gaps. The book's story begins in 1935 with the Roosevelt administration's adoption of antismuggling legislation, goes on to show how the Truman Proclamations of 1945 were based on a decade of Roosevelt ocean policies, pulls together the threads of policy concerning fisheries and the continental shelf under Truman and Eisenhower, pauses to look at greater length at the First and Second Law of the Sea Conferences in 1958 and 1960, describes the "interregnum" between international conferences in the sixties, and then concentrates on U.S. ocean policies and the Third Law of the Sea Conference in the seventies. The account finishes effective with the Ninth Session of the Conference in the summer of 1980 where the Carter administration is attempting to wrap up some of the problems faced earlier by the Nixon and Ford administrations. With respect to the historical account of U.S. ocean policies between 1935 and 1980, Dr. Hollick's book stands alone. It will quickly become the "standard text" for this period.

The book's other great contribution is its generalities concerning U.S. ocean policy which form the core of the opening and concluding chapters. Dr. Hollick's conclusions are persuasive, built as they are on a solid evidential and analytical foundation. Furthermore, they apparently do a good job in helping one comprehend recent events such as the decision of the Reagan administration to pull back, at least temporarily, from the Law of the Sea Conference. That decision seems intertwined with the picture Dr. Hollick paints of a United States torn between a general preference for the order that only a widespread multilateral solution to ocean problems can provide and a specific preference for certain solutions, e.g., respecting ocean mining, that might be better advanced by unilateral action taken outside of a conference dominated by developing countries. One important question is what if anything is lost by abandoning the multilateral option.

I am less sanguine than many about the capacity, legal and political, of the West to maintain or develop customary international law without the East or the South. Some feel that U.S. interests, e.g., the Navy and merchant shipping, that stand to "gain" from the contemplated Law of the Sea Treaty will not "lose" if no Treaty is adopted since customary international law already gives them what they need. A reading of Dr. Hollick's excellent book will, I think, dispel some of that optimism. Countries, including the United States, have been very busy outmoding customary international law of the sea in the past 45 years.

M.W. JANIS
University of Connecticut School of Law

Huisken, Ronald. *The Origin of the Strategic Cruise Missile*. N.Y.: Praeger, 1981. 202pp.

*The Origin of the Strategic Cruise Missile* is the most recent addition to a large family of case studies of major U.S. weapons programs. The author examines the technological, military, and doctrinal context in which America's current generation of ALCMs and SLCMs evolved. Particularly strong emphasis is given to the problems of bomber penetration to Soviet targets, *Minuteman* ICBM vulnerability, and the movement of U.S. declaratory policy towards nuclear counterforce, and the ways each of these moved the United States closer to cruise missile procurement. In the end, the author rejects the commonly heard view that cruise missiles were developed as SALT bargaining chips and concludes that the primary impetus for a strategic cruise missile program was the desire to demonstrate to the Soviets U.S. willingness to

maintain essential equivalence at the strategic level.

Unfortunately the data for this study were all derived from secondary sources. No "insider interviews" which characterize many previous weapons program case studies were used. Consequently, the author's "distance" from the subject of study is apparent, and his analysis is often superficial and impressionistic. Still, *The Origin of the Strategic Cruise Missile* does provide some interesting glimpses of the U.S. cruise missile program.

STEVEN M. MEYER
Massachusetts Institute of Technology

Messimer, Dwight R. *No Margin for Error*. Annapolis, Md.: Naval Institute Press, 1981. 167pp.

In an age when carrier-based aircraft form the backbone of the Navy's offensive and defensive punch, it is interesting to reflect back upon a time when the need for *any* Navy aircraft was seriously questioned. Such was the case in the United States in 1920. In order to demonstrate the versatility of naval aircraft, a flight was planned in which a team of Navy flying-boats would fly from California to Hawaii. In his delightful book *No Margin for Error*, author Dwight Messimer accurately and colorfully depicts the story of this record-breaking flight.

Operating aircraft over water, whether from shore bases or from carriers at sea, has long been known as an undertaking with "no margin for error." Messimer's choice of this phrase as the title of his book is particularly appropriate because this first "trans-Pacific" flight stretched the capabilities of the aircraft to the maximum—and perhaps slightly beyond. It was recognized from the start that a substantial "tail-wind" was a *necessity* to provide the range required to reach Hawaii. In the early planning stages:

> The project planners counted on the trade winds to increase the planes' ground speed to around 80 knots. At that speed, the trip would be made in just over twenty-six hours, leaving about a two and one-half hour margin . . . their ability to reach Hawaii in still air was non-existent.

Two different aircraft were chosen for the attempt, the PN-9 manufactured by the naval aircraft factory and the PB-1 built by the fledgling Boeing Company. Neither plane, however, was really up to the challenge of 2,100 miles of open ocean. The question that must be asked is "Why did the U.S. Navy undertake an adventure with such slim odds of success?" The answer to this question is clearly spelled out by Messimer as he paints a vivid picture of the military/political climate of the day. Since 1919, U.S. Army Gen. William "Billy" Mitchell had fought for a consolidated "national air force" which would have been responsible for all military aviation. By 1924, his campaign was well underway and the infant naval aviation arm was clearly on the defensive.

> Since 1923, Rear Admiral William E. Moffett, Chief of the Bureau of Aeronautics, had been looking for a way to stave off Mitchell's attack. Admiral Moffett had to convince the public that naval aviation had certain special requirements that could only be met if the aircraft and aircrews were an integral part of the fleet. What the Navy needed was a spectacular aviation accomplishment. In April 1924, following six months of in-house politicking, a plan to make a west coast-Hawaii flight was selected as being suitably spectacular.

Messimer covers the events leading up to the flight and then, with adventure-story excitement, details the crash at sea and subsequent events that have since become one of the great legends of naval aviation.

The book is well illustrated, with numerous photographs, charts and graphs, and should be enjoyed by all Navy history buffs.

JOHN E. JACKSON
Lieutenant Commander, SC, U.S. Navy

Pearce, George F. *The U.S. Navy in Pensacola*. Pensacola, Fla.: A University of West Florida Book/University Presses of Florida, 1980. 209pp.

It might at first be tempting to categorize Professor Pearce's book as a local history of western Florida filled with stories of the interesting people and events which make up the history of the Florida Panhandle, of the various Navy facilities in Pensacola over the years, and of the early history of naval aviation. Thus in one sense, it is the story of the politics of western Florida and the South from British, French, Spanish, and American rule through colony, to territory, and finally to statehood. In addition, it is the story of U.S. Navy operations out of Pensacola throughout the Gulf of Mexico, which have dealt with threats ranging from pirates to dictators to U-boats. It is also the story of the cycle of birth-growth-demise and rebirth of both the naval facility at Pensacola and the civilian community around it. Finally, it is of course the story of the birth of naval aviation.

On the other hand, the history of Pensacola may also serve as an interesting model of typical American attitudes and action when it comes to national defense. If ever a naval facility suffered from the action-inaction and interest-disinterest of the exigencies of American public opinion and politics when it comes to defense spending, it has been Pensacola. Thus it is informative just to note a few of Professor Pearce's chapter titles which are at once both nautical, political and descriptive in themselves. After "Launching" in the early 19th century, based on the need for a facility in proximity to the Gulf of Mexico and the Caribbean, came "Making Little Headway" after the pirate and slave trade had been suppressed by the Navy and the scourge of yellow fever in Pensacola found to be endemic. Then came "Under Full Steam" as Pensacola once again proved critical to U.S. efforts in the Mexican-American and Civil War, only to be followed by "Indecision in Washington" as the city and naval facility languished in the morass that was post-Civil War and Reconstruction politics. There was of course a "Rebirth" during the Spanish-American War and World War I followed by a "Demise" after the Great War when all things military throughout the country fell into decline. Finally, it was only with the birth of naval aviation and its rapid expansion in the 1920s that Pensacola could count itself really secure in its future.

Of all the pros and cons which were historically debated about Pensacola, one plus factor remains even today, the year-round moderate climate. Other factors, such as the presence of a natural harbor and its proximity to the Gulf of Mexico, seem far less important. On the negative side the strongest fear, based on several actual major outbreaks, was of yellow fever, but this great concern has not been a factor since the turn of the century. What is most evident is that throughout the story, for both the Navy and the city, the ties to southern history and politics are apparent. Thus in the early days, Navy business, just like the business of the rest of the country, was tied to the major cities, and the influence and power of the east coast. More than one early editorial from the various Pensacola newspapers quoted by the author laments that Washington continually ignored its responsibilities to the South and Pensacola in particular. The Navy facility would languish or boom based upon the priorities set in Washington and the subsequent budgets allocated by Congress based upon national politics. It is perhaps not

surprising that the best and boom times surrounded national emergencies such as the Mexican and Spanish-American Wars. Typically, though several base commanders and commandants had pleaded for nearly 50 years for construction of a drydock to handle major shipping repairs, it was only after the Spanish-American War that Pensacola received its first floating drydock as a reparation from the Spanish. It is also perhaps typical that after the drydock was completely destroyed in a 1906 hurricane, it was never replaced.

This pattern of waxing and waning fortunes for the Navy and the city is, of course, all too typical for those who believe the country has shown a remarkable tendency to ignore defense preparations and spending in times of peace only to be forced into emergency action in times of crisis. Therein perhaps lies the value of Professor Pearce's book, since the history of Pensacola clearly depicts this American tendency. Thus no matter how feverish the activity, once a commitment is finally made to preparations, expansion or growth, the delays will be costly in terms of money, waste or even lives. Professor Pearce has done a genuine service in his remarkably clear, interesting, and informative study of the Navy in Pensacola.

MICHAEL B. EDWARDS
Commander, U.S. Navy

Pechman, Joseph A., ed. *Setting National Priorities, the 1982 Budget*. Washington: Brookings Institution, 1981. 275pp.

This volume is the Brookings Institution's 12th annual study of the federal budget. Although the editors and individual chapter authors have changed over time, this series of analyses has been described as "a primary reference on the federal budget" and "the best single source of insights concerning how to think about complex policy questions." The current editor, and a principal author, is the director of the Brookings Economics Studies program and a specialist in the economics of public finance.

This year's book should continue the series' high repute, although it does not have the sweep of the 1980 publication which examined in some depth a number of key policy areas for the United States in the decade of the 1980s. What makes the FY 1982 budget particularly significant are the changes in the proposed budget between the outgoing Carter administration and the incoming Reagan administration. A Carter FY 1982 budget was submitted in January 1981, only to be followed by major revisions in Reagan messages sent to Congress on 18 February and 10 March 1981. Probably no change in Administrations since the 1930s has represented such a major shift in the philosophy of government as the replacement of the Carter with the Reagan administration.

In a chapter entitled "A Change in Direction" A. James Reichley discusses the ideology of the new Administration, tracing its roots back to the movement in the Republican Party that made Senator Barry Goldwater the party's Presidential candidate in 1964. The contrast between the lopsided defeat of Goldwater in 1964 and the resounding electoral vote victory of Reagan in 1980 could be read as a dramatic shift to the right in the American electorate's views on both domestic and foreign policy issues.

The Reagan revisions of the Carter FY 1982 budget highlight in the budgetary priorities the changes in ideology. Reagan increased budget authority for defense programs by $25.8 billion over the Carter proposals (as well as increasing the existing FY 1981 budget by $6.8 billion), and he cut nondefense outlays by an additional $40.4 billion over the cuts proposed by Carter. Reagan also fulfilled his campaign promises by calling for dramatic

tax cts. Although the President proposes, but Congress disposes on budgetary matters, as this review was being written the Administration had largely accomplished getting its expenditure program through Congress and seemed likely to obtain the major part of the tax proposals as well.

The Brookings study will be useful to readers in understanding these changes in the context of the budget's history, its outlook, and the relation of the budget to the economy and economic policy. The Brookings analyses of the effects of the Reagan measures on the economy and in the nondefense budget programs are frequently critical. These judgments reflect either differences in analytical approach or in values between the Administration and the Brookings analysts.

The chapter on the defense budget should be of greatest interest to readers of the *Review*. Its author, William W. Kaufman of Massachusetts Institute of Technology, also authored the chapter on defense policy in the 1980 Brookings volume. Although the Carter administration entered office trying to cut military spending, world events forced it to reverse that course, and its FY 1982 budget and Five Year Defense Program for FY 1982-86 called for real increases each year in total obligational authority and outlays, averaging 5.0 and 4.7 percent respectively and providing cumulative obligational authority over the 5 year period of $1,085.2 billion in real terms. The Reagan program would add an additional $195 billion of real total obligational authority over that period and raise the defense outlays' share of 1986 GNP to 7.0 percent, more than one percentage point above the GNP share of the Carter program.

Although Kaufman sees a need for defense spending beyond what is contained in the Carter program, he criticizes the Reagan approach to increasing national defense as mechanical and probably excessive. According to Kaufman, "Calculated underfunding of U.S. military programs in the past is no excuse for overfunding them in the future . . . . Both the executive branch and Congress have a duty to search more systematically for the defense policy and programs that are appropriate for the country in these ambiguous times." (p. 183)

Kaufman advocates prioritizing the increments to defense spending above the Carter program and sets forth four levels of priority, ranging from urgent programs to those that would be nice to have. The priorities reflect his assessment that in seeking additional hedges against the uncertainties that face the United States in providing military security over the coming decade, the greatest needs are for dealing with nonnuclear rather than nuclear war dangers and for meeting multiple, simultaneous contingencies rather than gearing all force planning to 1½ wars.

Kaufman's recommendations for his highest two priority increments are a mix of proposals, some of which should be generally acceptable to most readers, but others will be controversial. The defense community is likely to accept the measures to increase war reserve stocks, for pay increases to raise the numbers and quality of armed forces personnel, to procure more Navy and Air Force fighter aircraft, and to provide more sealift and escort vessels. However, his suggestions that more reliance should be placed on reserve component divisions and spending to increase their readiness by diverting funds from purchasing additional European prepositioned division equipment sets and for paying for the sealift and escort vessels, in part, by cancelling the procurement of the CX outsize airlift aircraft are more debatable. At issue here is whether the United States needs to place more emphasis on mobilization speed or on greater flexibility in its forces.

His conclusion that his lowest two priority hedges against uncertainty

could be eliminated for a $55 billion saving with no noticeable reduction in national security will also be questioned. And Kaufman's skepticism about the value of the B-1 strategic bomber and the need for additional Navy carrier battle groups to press the attack to Russian home waters will not please advocates of these programs.

Readers of this year's Brookings analysis of the federal budget will, as in the past, find plenty of material that is informative, enlightening, or provocative.

JOHN A. WALGREEN
Wheaton College

Rood, Harold W., *Kingdoms of the Blind*. Durham, N.C.: Carolina Academic Press, 1980. 294pp.

Professor Rood has written a book which should provide interesting reading to naval officers and other serious students of strategy. His two central themes are to document the "dangerous inclination democratic people have of discounting the likelihood of war" and call attention to the repeated Soviet preparations for war.

Without adhering to the principle that history repeats itself ("It is only the behavior of democracies that seems repetitious"), Professor Rood quickly repeats the lessons of the 1930s and then provides keen insights into the strategic nature of Soviet foreign policy since 1945. His analysis of submarine warfare is extremely well thought out and documented. Professor Rood does not dwell on the past and argues a good case for the current international situation being far worse than anything experienced by Great Britain in the prewar years.

The book presents a number of detailed case studies of the geopolitical implications of events in Cuba, Czechoslovakia and of the strategic importance of central Europe, the Mediterranean, and the Caribbean. Professor Rood develops an interesting and revealing scenario with regard to the magnitude of any operations which would be undertaken to neutralize Cuba. He adroitly ties this to his thesis that strategy is essentially "to force one's enemy to defend that which he has no choice to defend and in areas away from the principal theater of war, while one's own forces concentrate to achieve a decision in that theater of war where the outcome of battle will decide the outcome of war."

Europe remains the center of what Professor Rood views as the most likely area of future East-West confrontation. The book documents numerous examples of Soviet maneuvers that have significantly altered their options to the detriment of NATO. Soviet successes in arms control negotiations, while continuing to openly prepare for a winnable war, have been met with American optimism and adoption of the classic role of any peacetime democracy. Rood argues that the shift in favor of the East has already started to occur. He states that, "If the West prepares for war and no war comes, we may enjoy the freedom of criticizing ourselves for our foolishness. If war comes and the West is unprepared . . . . Our freedom will have died, killed by our blindness."

*Kingdoms of the Blind* is indexed and extremely well footnoted.

JAMES JOHN TRITTEN
Commander, U.S. Navy

Roskill, Stephen. *Admiral of the Fleet Earl Beatty. The Last Naval Hero: An Intimate Biography*. New York: Atheneum, 1981. 430pp.

The claim on the dust jacket notwithstanding, Captain Roskill's biography of Admiral Beatty is not the first biography of this distinguished British naval officer of the World War I era. Thirty years ago, Rear Adm. W.S. Chalmers recorded Beatty's naval achievements without delving into the more delicate features of Beatty's personal life or

bringing into full light some of the more deplorable practices in the Royal Navy. Sensitivities having eased with him, Roskill has secured access to the private papers of the Beattys, of Beatty's lover and her husband, and of the royal family at Windsor so that he can now provide a full portrait of the whole man.

None can dispute Roskill's assertion that the handsome and brave Beatty possessed "a very high degree of charisma" that won for him devotion in the Royal Navy from the lower decks up. His cap at jaunty angle, his especially cut jacket, his rich and beautiful American wife, and his spectacular rise to become the youngest British admiral since Nelson all attest to the panache that adorned the public image of David Beatty. Behind the panache, however, Roskill has found the terrible trials that Beatty suffered from his unbalanced wife, his affair with a woman who both loved him and sought to help him with his wife, his antisemitism, his disastrous approval of the recommendation by the Smuts Committee in 1917 that Britain establish a separate air arm, and much more.

Predictably, Roskill's biography of Beatty also includes numerous comments on Professor Marder's treatment of the Royal Navy in *From Dreadnought to Scapa Flow*, especially Marder's assessments of the British at the battle of Jutland. Neither Roskill nor Marder have been drawn into the partisan debate over the conduct of Admirals Jellicoe and Beatty at Jutland. What Marder saw as caution in Jellicoe, however, is timidity to Roskill, and Roskill finds Beatty a good deal more decisive and flexible than did Marder. Whereas Marder attributed heavy losses of the British at Jutland to careless handling of cordite, Roskill would still stress the weakness of British armor. Roskill blames poor British shooting on the Admiralty's adoption of the Dreyer fire control system, rather than the superior system developed by Arthur Hungerford Pollen. Although Roskill claims that Beatty sought to reverse the overcentralization that stifled initiative in the Royal Navy, he also conceded that there was too much wrong with Beatty's staff work for later generations to conclude that the admiral should be counted among the great handlers of fleets. American historians familiar with the debates between line and staff officers in the U.S. Navy should note Roskill's conclusion that excessive domination by line officers over specialists and scientists may have cost the Royal Navy technological leadership over the German Navy.

While Roskill does not sit as judge over the Jutland controversy, he deplores as extremely unwise Beatty's underhanded efforts to tamper with history. Why Beatty was so anxious to cover up the circular movement of his flagship at Jutland remains one of the fascinating mysteries of battle history.

As in his earlier work, Roskill has written of Beatty and the Royal Navy from the point of view of an insider who can draw from his own rich personal experience and background to find meaning in his materials. It is one of the tragedies of American naval history that no American naval officer shall ever write on the U.S. Navy during the early 20th century as has Captain Roskill on the Royal Navy.

WILLIAM R. BRAISTED
The University of Texas at Austin

Sarkesian, Sam C. and Scully, William L., eds. *U.S. Policy and Low-Intensity Conflict: Potentials for Military Struggles in the 1980s*. New Brunswick, N.J.: Transaction Books, 1981. 221pp.

The essays in this book represent a serious discussion of how the United States can protect its foreign policy interests in the many localized conflicts that are likely to occur in the Third World. The authors recognize that there

are many different types of conflict in the Third World and that these conflicts cannot all be classified under one heading. They acknowledge that the phrase "low-intensity conflict" is an inappropriate one, since many Third World conflicts are actually highly intense, though fought in a limited geographical area.

The authors see two main obstacles to successful U.S. involvement in Third World conflicts: 1) lack of military forces dedicated to and trained for Third World contingencies, and 2) lack of public support in the wake of Vietnam for further U.S. military involvement in such conflicts. Their recommendation for a solution to the first problem is, sensibly enough, the earmarking of specific forces for Third World conflicts and training them to fight in the types of war that occur there. Concerning the second problem, the authors are less able to provide a solution. They feel that the United States should only become involved in conflicts that American public opinion would support. To this end, the United States should ensure that any conflict is not a protracted one and that it does not receive adverse coverage in the American media. How these two conditions can be met, however, is uncertain since both depend on the opponent rapidly being defeated and the media cooperating with government policy. As neither of these conditions can be guaranteed, the problem of public support does not appear to be one that can be resolved easily.

The main problem with the essays in this book is that the authors look at Third World conflicts only in terms of how the United States can protect its interests in them. For the United States this means preventing the U.S.S.R. from gaining influence, whereas for the local participants in such conflicts American and Soviet interests may be less important than their own interests. For example, a military dictatorship supported by the United States may be less interested in halting Soviet influence than in maintaining itself in power, no matter how unpopular the dictatorship is internally. If U.S. support to an unpopular government leads the populace to favor Soviet-backed forces coming to power, then U.S. support to such a government would be counterproductive in halting the spread of Soviet influence.

More generally, the nature and the goals of the contending parties in a Third World conflict will affect how successful the United States will be in achieving its own goals through supporting one side or another. Supporting an unpopular dictatorship can severely hinder the achievement of U.S. goals no matter how large a military effort the United States makes, but even low-level American aid to popular groups (such as the Afghan rebels) could prove highly effective.

The nature and the interests of local participants are an important factor in determining how successful U.S. interests in Third World conflicts can be achieved. This factor deserved more attention in a discussion of U.S. policy toward such conflicts than it received in this book.

MARK N. KATZ

Ulam, Adam B. *Russia's Failed Revolutions: From the Decembrists to the Dissidents.* New York: Basic Books, 1981. 453pp.

To the student of Russian history, Adam B. Ulam requires no introduction. During his career as Professor of History and Political Science at Harvard University, Professor Ulam has written numerous studies that have established his reputation for serious scholarship. The very title of his latest work should arouse the curiosity of specialist and layman alike.

In *Russia's Failed Revolutions*, Professor Ulam addresses the following question: "What was it that at decisive

moments frustrated or flawed the libertarian intentions of Russia's revolutionaries and reformers?" In the course of interpreting the evidence concerning the writings and activities of the Decembrists (1825), the Russian Populists (in the 1860s and the 1870s), the various participants in the revolutions of 1905 and 1917 as well as the present-day dissidents, the Harvard professor unveils a rich mosaic of institutional and personality factors which, in each period, provides a distinct setting for the operation of the prime suspect—Russian nationalism.

Shared by virtually every Russian, even Russian revolutionaries, was the conviction that only the firm rule of the autocrat could contain the centrifugal forces present in the vast territory "gathered" by previous tsars. They also credited the tsar for Russia's emergence, following the defeat of Napoleon, as the greatest military power in Europe.

It was precisely the firmness and power of the tsarist autocracy which forced Russia's revolutionaries to resort to extreme remedies. During the 19th century, revolutionary measures only exacerbated a regime's reaction. Such extremes allowed little room for reform. Professor Ulam correctly observes that both the social reform of the 1860s and the political reform of 1905 were initiated by the tsar in the wake of military defeat. Only when the autocrat's own failures undermined Russia's greatness, and thus his bond with the people, did the need for reform manifest itself. World War I destroyed the bond, but only after political assassinations, bureaucratic collapse, liberal and radical intrigues, Rasputin's antics, and the rumors about German sympathizers in high places had created substantial uncertainty about the regime's worth.

There are different perspectives from which one can evaluate Russia's revolutions. The historian, worker or peasant in the Soviet Union readily would acclaim the Bolshevik revolution a success. Under the rule of the Communist Party, the Soviet Union has become a superpower. The national mystique formerly accorded the tsar now bolsters the Soviet leadership.

Professor Ulam believes that all of Russia's revolutions have failed precisely because Western concepts about "democracy, intellectual freedom, the rule of law, [and] socialism" still do not guide political and social activity in the U.S.S.R. Given his perspective, one can understand why he so carefully examines the reasons for the failure of the liberals who ruled in the Provisional Government. They attempted to incorporate these concepts!

The Provisional Government fell, according to the Harvard professor, because it failed "to exploit the period of nationalist enthusiasm which followed the [February] revolution." Nationalism might have been the brake which could have prevented Russia's slide from liberty to anarchy. Russia's anarchy cried out for the firm rule that V.I. Lenin was all too willing to provide.

Adam Ulam's study, *Russia's Failed Revolutions*, is both much richer and more subtle than this review has indicated. The many vignettes in the book not only demonstrate the author's mastery of the source material, but render his history immensely readable!

Finally, we must contemplate Professor Ulam's conclusion that "there is little that can be described as uniquely Russian about the country's pattern of political development in the last century and a half." Our acceptance or rejection of his optimistic conclusion provides the very foundation for our views about Soviet-American relations.

WALTER C. UHLER

Winton, John. *Sink the Haguro!* London: Seeley, Service, 1979. 182pp.

Naval operations in the Indian Ocean during World War II are considered by most historians to have been an unimpor-

tant footnote to the dramatic campaigns waged in the Atlantic and Pacific. For the most part, that assessment is correct. The Japanese were firmly entrenched in Thailand, Malaya, and Sumatra, and their warships were deployed to counter the Allies in the Pacific, operating infrequently but with impunity in the Indian Ocean from their base in Singapore. In opposition was the East Indies Fleet, a ragtag collection of ships operated more or less willy-nilly from Trincomalee (Ceylon). *Sink the Haguro!* focuses on that fleet's single moment of magnificence and a night's battle that assured their largely forgotten efforts a small place in history.

A *Nachi*-class heavy cruiser, *Haguro*, at 15,000 tons, displaced more than twice the combined displacement of the five destroyers that sunk her. She was armed with ten 8″ guns, eight 5″ guns, over 50 25mm guns, long-range torpedoes and two seaplanes. In contrast, the destroyers of the 26th Destroyer Flotilla—*Saumarez, Venus, Virago, Verulam,* and *Vigilant*—were smallish at 1,800 tons, modestly armed with four single 4.7″ guns, close-in torpedoes, and primitive radar sets. However, the British had the distinct advantage of knowing the general movements of the Japanese capital ships by means of ULTRA intercepts and additionally had surveillance and attack aircraft available from the carriers that joined the fleet in 1944. Though located, *Haguro* still represented an elusive threat in the restricted waters of the Malaccan Strait and, in the end, it was a fortuitous combination of well-practiced tactics, surprise, and better maneuverability that proved to be the key elements of victory. The actual sinking is a fascinating story that has been imaginatively pieced together from ships' action narratives, message files, diaries, photographs, and postaction accounts (including those of Japanese officers assigned to *Haguro*). Winton's skills as a novelist (H.M.S. *Leviathan*) take the reader into the action on the bridges, flight decks, action information centers, gun turrets and tubs, and down on the deckplates.

However, the battle action itself is only a small part of this fast-moving book, for Winton paints a vivid backdrop of the tedious days at Trincomalee, the frustrating life at sea seeking to engage the enemy, the trials and tribulations of World War II vintage carrier aviation, submarine warfare, and the newest invention of the war—radar. One of the Allies most productive innovations, ULTRA, played a major role in the East Indies operations and provided vital tactical intelligence that guided the efforts of the fleet.

Finally, Winton injects the book with a colorful flavor of the personalities of the fleet—from the fleet commander to the fireroom stoker, to the radar operator who tracked *Haguro* in the early morning of 15 May 1945, more than a week after V-E Day had ended the war for all but a few. Casual historians will appreciate the peculiarly British flavor of this very readable account, its first person style, and the thorough research on which it is based.

J.P. MORSE
Lieutenant Commander, U.S. Navy

Y'Blood, William T. *Red Sun Setting. The Battle of the Philippine Sea.* Annapolis: Naval Institute Press, 1981. 257pp.

"The Battle of the Philippine Sea in June 1944 was a naval action equal to Midway in tactical interest, and decisive on the outcome of the war, for it was the greatest carrier action of all time." So states Rear Adm. Samuel Eliot Morison in his famous *History of the United States Naval Operations* in World War II. Taking his cue from Admiral Morison, author Y'Blood gives us an hour-by-hour account of what became known as the "Great Marianas Turkey Shoot" and what was clearly one of the

most decisive 2-day battles in military history.

To his credit, the author tries to tell both the Japanese and American stories. Calling on a tremendous variety of sources, ranging from war diaries, action reports, oral histories, and eyewitness accounts to an extensive number of other books both American and Japanese, the story is meticulously told from the formulation of both sides' tactical plan, through the incredibly exciting air actions, to the perhaps inevitable recriminations which followed.

The Japanese plan was called "Operation A-GO." Its intention was to draw the Americans into what the Japanese commander called "a decisive battle . . . . to attack and destroy the enemy force." Because Vice Admiral Ozawa recognized that his fleet would be numerically inferior, a critical element of the plan was that his carrier-based aircraft would be augmented by a whole series of land-based bombers and fighters from various bases in the Marianas. That this planned key to his success would result in utter failure came to haunt Ozawa throughout the battle, especially since every other element of the initial plan worked. Sortieing northeast from bases in New Guinea via the Philippines, the Japanese made the initial attacks concentrating on the American carriers. They had the lee gauge advantage for launch and recovery and even had the Americans tactically squeezed up against the western side of occupied Guam cutting off their sea room, keeping them well within range of the land-based Japanese aircraft. Just before the battle, the combined Fleet Commander Admiral Toyodo recalled the famous Japanese victory over the Russians at Tsushima with Admiral Togo's exhortation to Ozawa, "The rise and fall of Imperial Japan depends upon this one battle." The quote was perhaps prescient and, even more, ironic as Ozawa confidently launched his young pilots against the Americans.

The American plan was "Operation Forager," and its primary mission amphibious landings throughout the Marianas, principally in Saipan, Guam and Tinian. Adm. Raymond A. Spruance commanded Forager, which included two major amphibious task forces plus the large carrier Task Force 58 under Vice Adm. Marc A. Mitscher. The principal mission of TF 58 was to destroy enemy ships, planes, and troops; however, it also had the additional responsibility of protecting the amphibious forces from attack. This "double mission" of on the one hand defending the amphibs and protecting the troops ashore, while on the other hand being responsible for aggressively seeking out the enemy, would ultimately haunt Spruance.

But the battle belonged to the American pilots. It was not for nothing that the action came to be called the "Turkey Shoot." The author, a commercial pilot himself, describes in great detail, from air after-action reports, the hundreds of engagements fought by the adversaries. Sighting what was probably the single advantage for the Americans, training and experience, the author relates how the young pilots fought off four massive Japanese attacks on the first day, splashing literally hundreds of raids in actions so fast and furious it was impossible to follow from the ships. On the second day, after stretching their air legs to the maximum and reversing the roles from defense to offense, the Americans made their famous attack into the setting sun against the Japanese Fleet, sinking two carriers and splashing most of the defenders. This incredible action was then immediately followed by an agonizing nighttime flight home to the carriers and a night recovery which was the first for many of the Americans.

The losses for the Japanese were incredible. Besides the two carriers,

Ozawa lost over 400 planes and aviators from his fleet plus over 50 of the land-based planes upon which so much had depended. The Japanese Naval Air Force had, in 2 days, suffered a blow from which it would never recover. For the Americans the losses were relatively light. Although over 100 planes were lost, many had simply ditched, out of fuel and unable to make the night carrier landings, but because of some superb rescue work by the destroyers, only 16 pilots and 33 crewmen were lost.

The recriminations after the battle dealt primarily with what some called the American failure to deal an even more decisive blow to the Japanese Fleet. The author criticizes Admiral Spruance for being too cautious and defensive, thus losing the opportunity to do more because he was not an aviator and therefore misunderstood the more "free-wheeling" tactics of the carrier force. Indeed, experience had already shown that a mobile and aggressive carrier force was in fact most effective; however, it seems excessive to this reviewer to criticize Spruance when at least part of his mission was to protect the invasion force ashore. Noting that Admiral Spruance himself stated after the war that it would have been more "satisfying" to have won an even greater victory, it certainly would have been no less dissatisfying to have gone off on a tail chase with the Japanese Fleet leaving the troops ashore vulnerable to Japanese land-based air attack. In any event this book is a balanced, thoughtful and insightful account which is at once scholarly and readable.

MICHAEL B. EDWARDS
Commander, U.S. Navy

## RECENT BOOKS

### Selected Accessions of the Naval War College Library

**Annotated by**

**Doris Baginski, Steven Maffeo
Jane Viti, and Mary Ann Varoutsos**

Abrahamson, James L. *America Arms for a New Century: the Making of a Great Military Power.* New York: Free Press, 1981. 253pp. $17.95

Students of American military history will be interested in this probe into the effects of the Progressive Era (1880-1920) on the transformation and modernization of our country's armed forces. Abrahamson describes how the United States, which was a minor military force at the end of the 19th century, had become a great military power by the end of the Great War. He explores the reform efforts of such military greats as Generals Sherman, Schofield, Pershing, and Wood; and Admirals Porter, Luce, Dewey, and Fiske. The book assesses the military's awareness of trends that were reshaping both domestic conditions and the world order and the likely effect of those transformations on America's military institutions and policies.

Barnet, Richard J. *Real Security: Restoring American Power in a Dangerous Decade.* New York: Simon and Schuster, 1981. 127pp. $10.95

Contradicting the notion that increased defense spending and a more aggressive military stance will reverse the decline of U.S. power, the author argues that national security analyses generally overemphasize sheer numbers. Real political security evolves more from the nature of military power than from the quantity of soldiers and weapons. Barnet contends that arms limitation agreements promote stable political climates. American power and influence will best be restored by significant reductions in foreign oil dependence and the steady management of inflation. The real danger, he fears, is that the United States may be steering toward disaster with a misconceived military buildup and pugnacious attitude abroad.

Brittin, Burdick H. *International Law for Seagoing Officers.* 4th ed. Annapolis, Md.: Naval Institute Press, 1981. 483pp. $22.95

The past 25 years have seen a profound change in the law of the sea. This long-awaited fourth edition takes into account the results of the Law of the Sea Conference proceedings as well as actions of the world community that have affected or changed international law since 1972. Also included are sections that deal with space law, the status of military and civilian personnel in foreign countries, and the rapidly expanding body of law dealing with armed conflict. Therefore, this might also be a useful reference tool for those whose business or interest pertains to the oceans and foreign lands.

*The Common Security Interests of Japan, the United States, and NATO.* Cambridge, Mass.: Ballinger, 1981. 232pp. $19.50

The authors are concerned with the Soviet Union's military buildup and the challenges it poses for the United States, Japan, and Western Europe. Members of the Atlantic Council of the United States and Japan's Research Institute for Peace and Security formed a Joint Working Group to study this issue and the East Asian power balance as well. This collection consists of a collective policy paper, which stresses the acute need for consultation among the major industrial democracies and makes recommendations for enhancing allied military capability, political strength, and economic strength; and nine working papers commissioned from among members of the Joint Working Group.

Cordier, Sherwood S. *The Air and Sea Lanes of the North Atlantic: Their Security in the 1980's.* Lanham, Md.: University Press of America, 1981. 84pp. paper $6.25

Linking the transatlantic community together, the sea and air lanes across the North Atlantic represent essential lines of communication and transport. The untrammeled use of this ocean is crucial to the security of Western Europe. Cordier stresses that the West must be solidly capable of defending these lines to prevail during conflict and as a peacetime deterrent. He specifically studies the air defense of Britain, air control at sea, and the Soviet naval—particularly submarine—challenge. In addition, Cordier discusses short-term and long-range measures that can reinforce the security of this vital oceanic area.

Frei, Daniel, ed. *Definitions and Measurement of Détente: East and West Perspectives*. Cambridge, Mass.: Oelgeschlager, Gunn & Hain, 1981. 216pp. $22.50

Fluctuations in the complex state of East-West relations inevitably affect international relations worldwide. In this collection, theories relevant to defining and measuring détente are analyzed in depth by social scientists, political analysts, and experts in international relations from both sides. They believe that it is necessary to establish observable, objective criteria to assist in the evaluation of a complex relationship such as détente. It is the editor's opinion that methodological reflection will assist in the establishment of a strong base that is a precondition for successful discourse between the two superpowers. The papers were originally presented at an East-West symposium on détente held in Zurich in November 1979.

Gallo, Patrick J. *Swords and Plowshares: the United States and Disarmament, 1898-1979*. Manhattan, Kans.: MA/AH Publishing, 1980. 170pp. paper $15.95

Man has always worked toward reconciling his search for disarmament with his desire for security. It has been a forbidding struggle, for the effort has necessarily juxtaposed idealism and sincerity with greed and fear. Gallo relates the American historical experience of disarmament and explains the motivations for U.S. disarmament positions. Essentially divided into three sections, the book particularly concentrates on the periods 1898-1914, 1919-1938, and 1940-1963. The author proposes interpretations regarding U.S. participation in disarmament conferences during each chronological period. In addition, a chapter analyzing American governmental principles and goals follows each main section.

Jones, Rodney W. *Nuclear Proliferation: Islam, the Bomb, and South Asia*. The Washington Papers, v. IX, no. 82. Beverly Hills, Calif.: Sage, 1981. 88pp. paper $3.50

Recent events in Afghanistan, Iraq, and Iran have drawn attention to the dangers of nuclear proliferation in South Asia for regional stability and Islamic relations. Sponsored by Georgetown University's Center for Strategic and International Studies, this paper analyzes the implications of these developments for U.S. national security interests and national security policy, giving considerable emphasis to the immediate threat of proliferation to an assured oil supply and worldwide economic vitality. An outline of ways in which technical and political nonproliferation approaches may be integrated with each other, and with American security policies, is provided.

Ledeen, Michael and Lewis, William. *Debacle: the American Failure in Iran*. New York: Knopf, 1981. 256pp. $14.95

Ledeen and Lewis, a journalist and a political scientist, evaluate the nature of American foreign policy through an investigation of the recent revolutionary crisis in Iran. They proclaim a direct relationship between the events that led to the downfall of the shah and the shortcomings of U.S. foreign policy. Successful foreign policy is defined as having sufficient military power to deter political enemies, stable alliances to enhance national security, and clarity and coherence in the pursuit of objectives. The authors believe we are

capable of meeting these standards, but have lacked the leadership to achieve them.

Nogee, Joseph L. and Donaldson, Robert H. *Soviet Foreign Policy since World War II.* New York: Pergamon Press, 1981. 320pp. $35.00

Duality in Soviet attitudes and behavior has evolved since the end of the Second World War when Russia emerged as a superpower with special status in world affairs. Important forces and circumstances have modified Soviet domestic and international environments producing both continuity and change. The continuity stems from basic Soviet communist doctrine which holds a malign view of the United States. Change is evident in the periods of peaceful coexistence and détente that break the antagonism between the two countries. This study analyzes the development of the Kremlin's policy in terms of internal and external variables, providing an overall synthesis of the evolution of contemporary Soviet foreign policy.

Pipes, Richard. *U.S.-Soviet Relations in the Era of Détente.* Boulder, Colo.: Westview Press, 1981. 227pp. $25.00; paper $10.00

Richard Pipes, Baird Professor of History at Harvard University, was the director of Harvard's Russian Research Center from 1968 to 1973. In this volume, he presents eight essays on Soviet foreign military policies which were published between 1969 and 1980. The introductory essay, which presents in embryo many of the ideas developed subsequently, compares the psychological, cultural, and historical background of American and Soviet political outlooks. Further essays investigate some operational principles in Soviet foreign policy and the Soviet interpretation of détente. Convinced that the Soviet Union is pursuing a "grand strategy" with deep historical precedents, Pipes concludes by analyzing the role militarism plays in communist mentality, theory, and practice.

Prybyla, Jan S. *The Chinese Economy: Problems and Policies.* 2d ed., rev. Columbia: University of South Carolina Press, 1981. 331pp. $19.50

Economic growth in China in the last 30 years has expanded rapidly. China has progressed from a poor, peasant economy into a socialist state which is able to provide essential food, clothing, housing, and social services to its citizens on a regular basis. Discussions of major economic problems are followed by an analysis of the policies which have been implemented to correct past economic shortcomings. This is an introductory examination of the concerted effort to expand and strengthen the economy so as to make China into a modern industrial power by the year 2000.

Ross, Tweed W., Jr. *The Best Way to Destroy a Ship: the Evidence of European Naval Operations in World War II.* Manhattan, Kans.: MA/AH Publishing, 1980. 213pp. paper $23.00

This work, originally a master's thesis, attempts to compare the relative effectiveness of various naval weapons used in the Atlantic Theater during World War II. Structured narrowly on types of ordnance, it specifically analyzes weapons and their effect on sea control. Ross endeavors to study in great detail the limitations, strengths, and proper employment of the different devices. Statistical methodology is central to the paper, which represents an effort to derive significant correlations and foundations that

rely on fewer historical judgments. In addition, Ross includes naval theory segments with each chapter, interpreting how these weapons were viewed both before and during the war.

Snow, Donald M. *Nuclear Strategy in a Dynamic World: American Policy in the 1980s*. University: University of Alabama Press, 1981. 284pp. $25.00

The formation of strategic nuclear doctrine is presently cause for much debate. The arms race, the Soviet challenge ro the United States, and the danger of nuclear weapons proliferation all point to a ctitical need to teview and tevise U.S. strategic concepts. Ateas of major disagreement center upon specific policy matters: what should constitute the basis of American strategic doctrine, and what direcrion should the strategic system take. In a cleat and comprehensive manner, the author gives an overview of the theoretical approaches that have been employed, discusses the basic concepts of deterrence and arms control, and examines the development of strategic doctrine and forces in both the United States and the Soviet Union.

Szuprowicz, Bohdan O. *How to Avoid Strategic Materials Shortages: Dealing With Cartels, Embargoes, and Supply Disruptions*. New Yotk: Wiley, 1981. 312pp. $19.95

Oil, aluminum, gold, titanium, cobalt, plutonium, and scores of other commodities ate significantly altering the world's economic and polirical terrain. This book outlines the factors that must be continually monitored when assessing the vulnetability of industries and governments facing possible politically motivated shortages of these items. Szuprowicz, a specialist in high-technology marketing, analyzes the cartels controlling vast percentages of world strategic materials. He provides a methodology for developing a vulnerability index geared to avoiding problems in critical materials planning. Additionally, based on possible groupings of various Third World countries, he presenrs hypothetical scenarios as models for fundamental contingency planning.

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